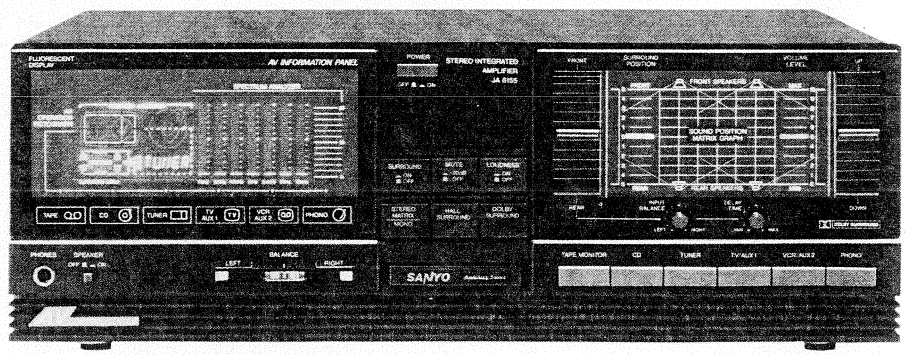
SERVICE MANUAL

SANYO

JA 6155 (WEST GERMANY)

AV CONTROL CENTER

PRODUCT CODE NO.
129-254-05 (Black)



SPECIFICATIONS

Note:
The below mentioned specifications are mainly based on the IHF measurements standard. They can therefore not directly be compared with specifications based on the DIN standard or other standards.

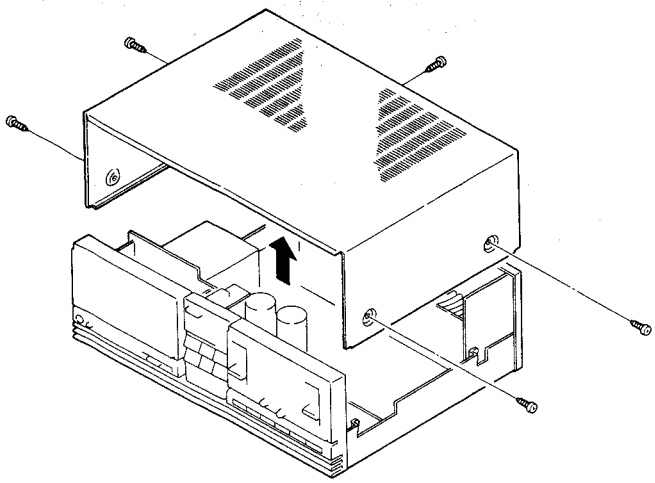
Continuous output power	
FRONT	100 W x 2 (at 8 ohms, 0.9% distortion)
REAR	20 W x 2 (at 8 ohms, 0.9% distortion)
Input sensitivity and impedance	
PHONO	2.5 mV/47 kohms
CD/TV/AUX1/VCR/AUX2	150 mV/47 kohms
Frequency response	20 Hz – 35 kHz (CD)
Loudness control response (Vol. –30 dB)	+8 dB/+4 dB (100 Hz/10 kHz)
Signal to noise ratio	95 dB (CD)
Power requirements	AC: 220 V, 50 Hz
Power consumption	620 W
Dimensions (W x D x H)	Approx. 420 x 340 x 140 mm (16-1/2" x 13-3/8" x 5-1/2")
Weight	Approx. 9.7 kg (21 lbs.)

Specifications subject to change without notice.

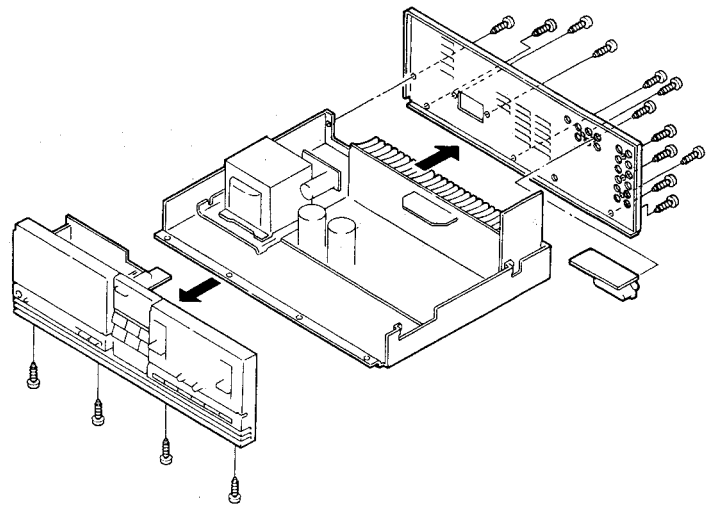
REFERENCE NO. WM-21064

DISASSEMBLY

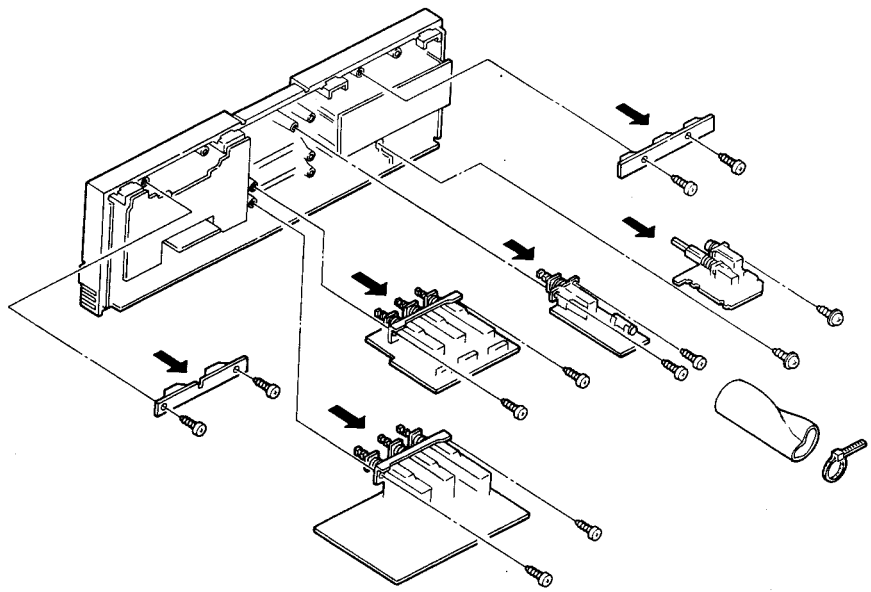
CABINET REMOVAL

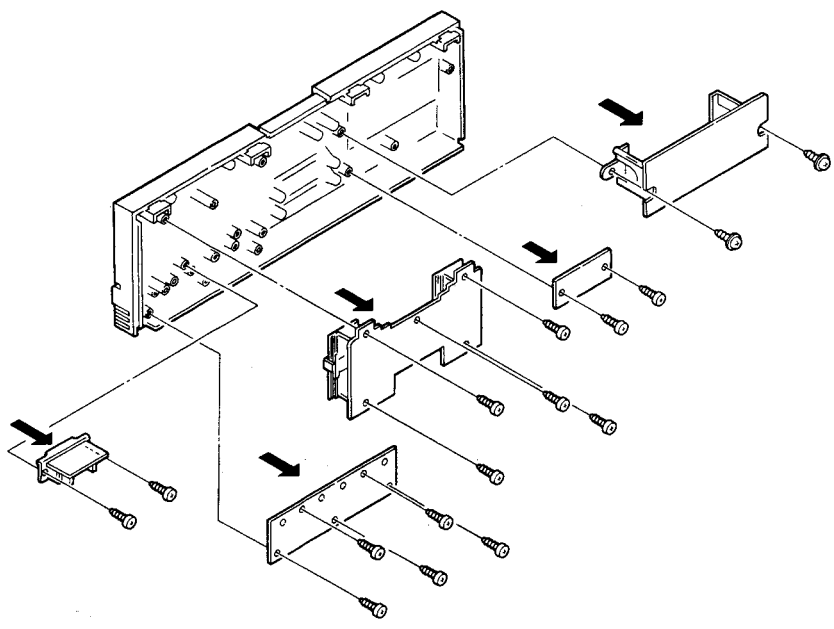


FRONT PANEL AND BACK PANEL REMOVAL



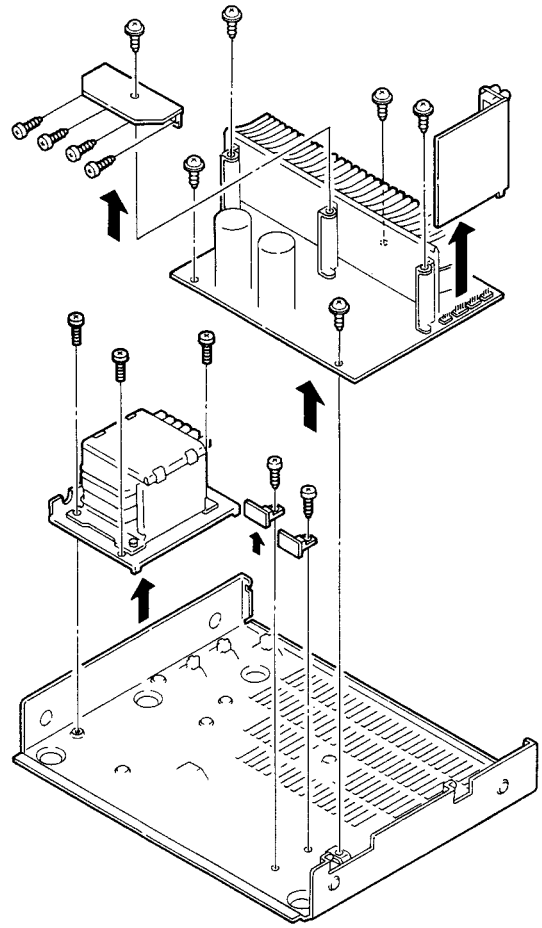
PCB REMOVAL





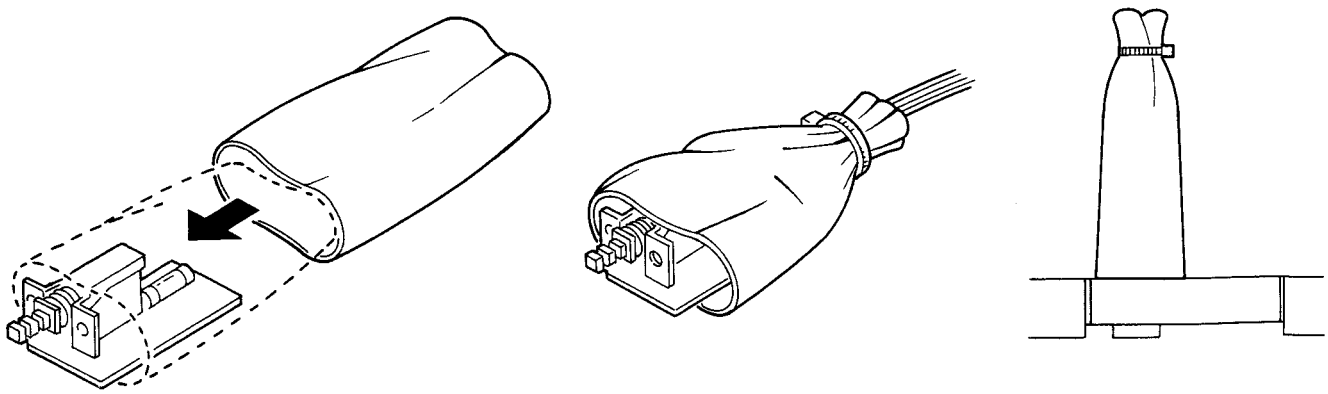
DISASSEMBLY

POWER TRANSFORMER AND PCB REMOVAL

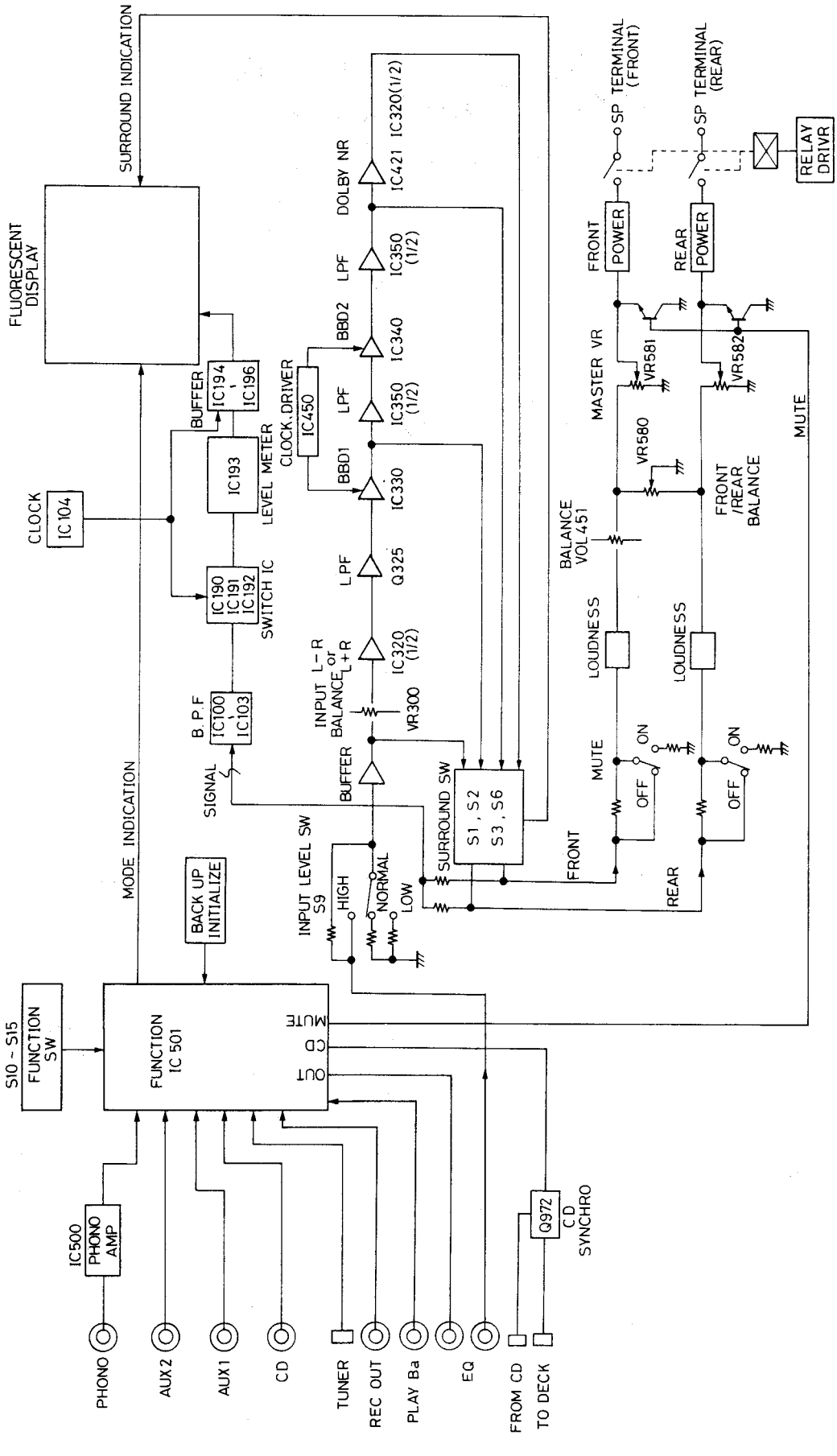


SAFETY CAUTION:

WHEN REMOUNTING THE POWER SWITCH PCB ASSY, DO NOT FORGET TO COVER THIS PCB ASSY WITH TUBE (REF. NO. 29) COMPLETELY AND SECURELY FIX THEM WITH FIXER (REF. NO. 30). BE CAREFUL NOT TO EXPOSE THE PCB ASSY FROM THE TUBE TO PREVENT ELECTRICAL SHOCK.

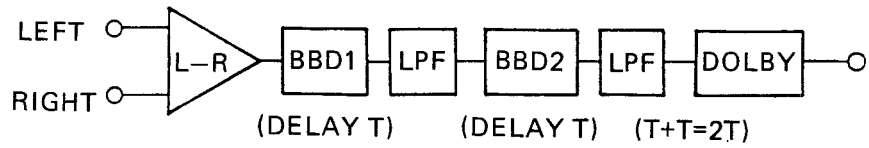


BLOCK DIAGRAM

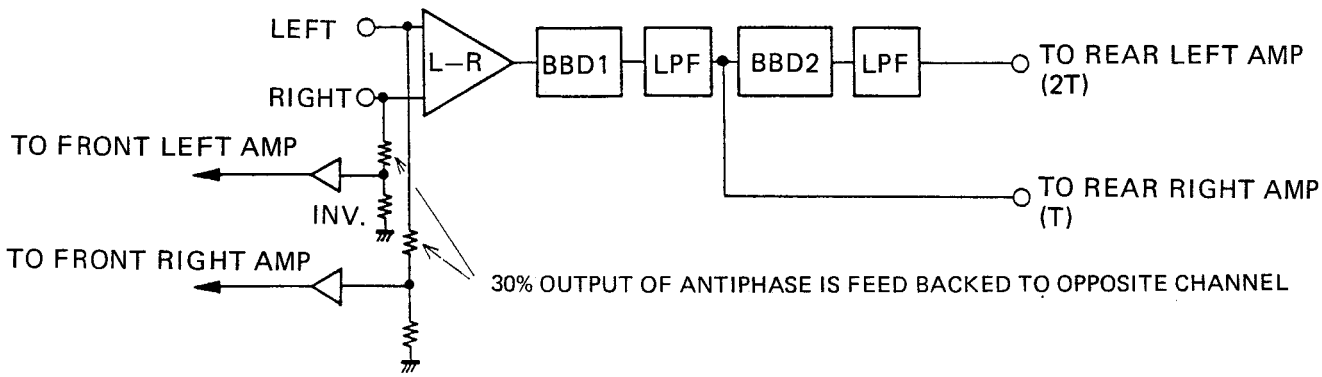


SURROUND BLOCK DIAGRAM

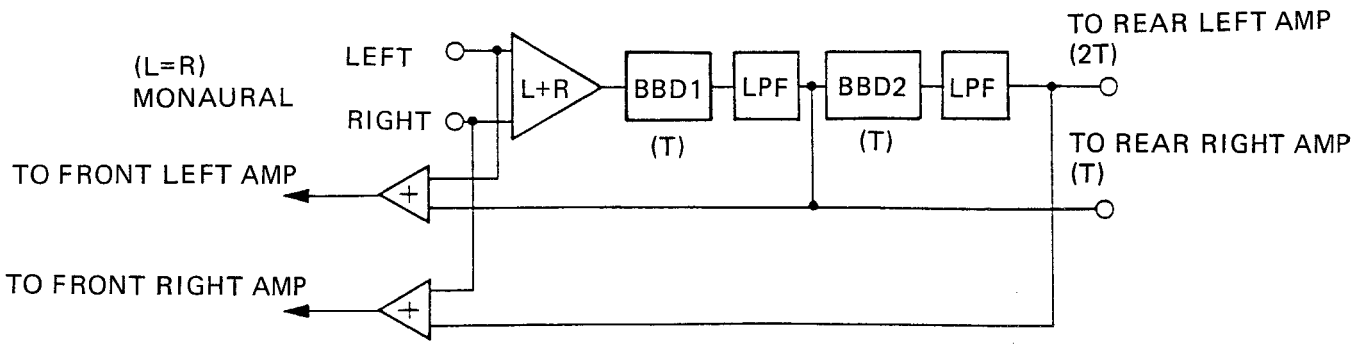
DOLBY SURROUND



HALL SURROUND



STEREO MATRIX



	FRONT LEFT	FRONT RIGHT	REAR LEFT	REAR RIGHT
DOLBY SURROUND	L	R	(L–R) + 2T + DOLBY	(L–R) + 2T + DOLBY
HALL SURROUND	L–R/3	R–L/3	(L–R) + 2T	(L–R) + T
STEREO MATRIX	L + REAR L	R + REAR R	(L+R) + 2T	(L+R) + T

NOTE: T means 7.5 msec. – 15 msec. delay time at one BBD (1024 stages). In the DOLBY SURROUND mode, delay time becomes 2T and it can be adjusted in the range of 15 msec. – 30 msec.

ELECTRICAL ADJUSTMENTS

A. BIAS ADJUSTMENT

CONDITIONS
1. No signal
2. All switches : OFF
3. Main volume : Minimum
4. Adjustment should be made after 3 minutes that the power switch is turned on.

A-1. Front
1. Adjust SVR701 to obtain 0.5 – 1.0mV reading on DC voltmeter connected to terminals of R719.
2. Adjust SVR801 to obtain 0.5 – 1.0mV reading on DC voltmeter connected to terminals of R819.

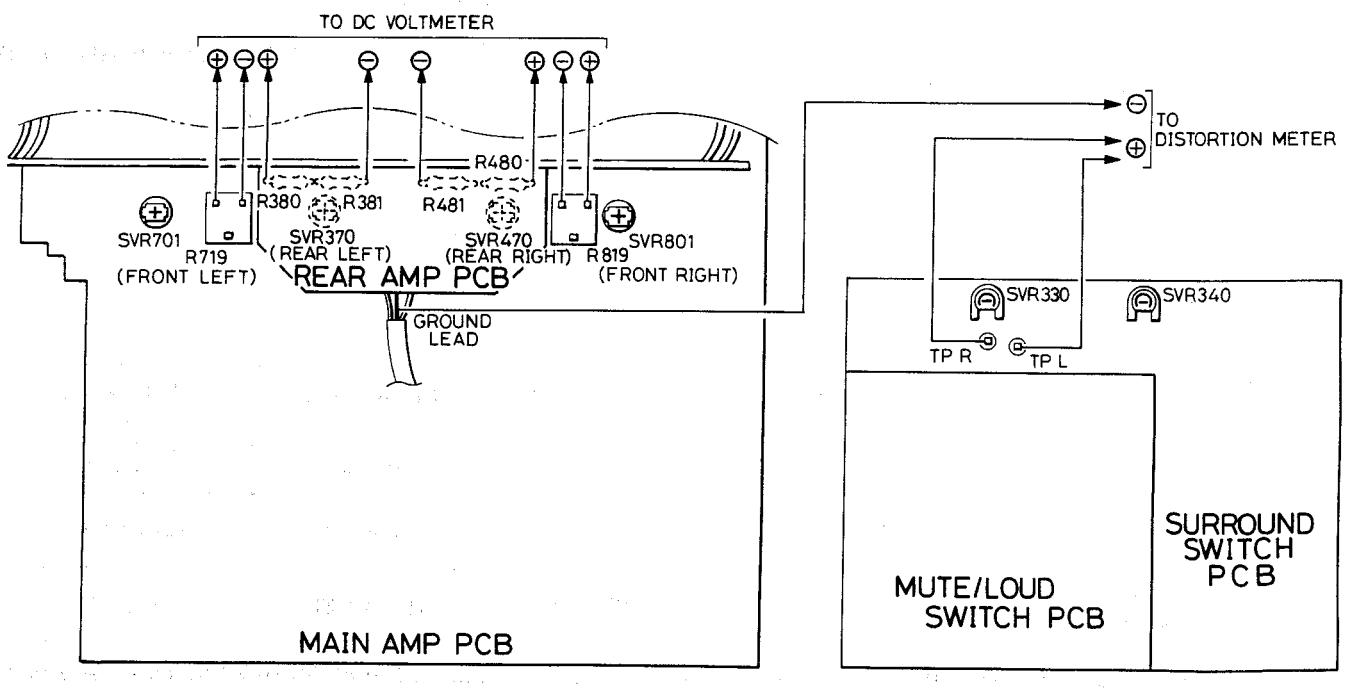
A-2. Rear
1. Adjust SVR370 to obtain 0.5 – 1.0mV reading on DC voltmeter connected to terminals of R380 and R381.
2. Adjust SVR470 to obtain 0.5 – 1.0mV reading on DC voltmeter connected to terminals of R480 and R481.

B. BBD (BUCKET BRIGADE DEVICE) OFFSET ADJUSTMENT

1. Connect the audio signal generator to the left channel socket of AUX1.
2. Input the 1kHz 1V signal.
3. Set the controls of the unit as follows.

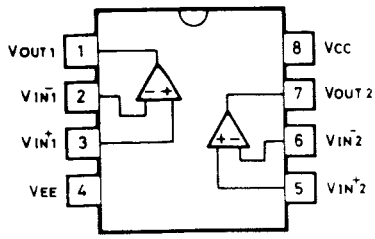
MUTE switch	: ON
LOUDNESS switch	: OFF
SURROUND switch	: ON
FUNCTION switch	: AUX1
SPEAKER switch	: OFF
VOLUME control	: MAX
INPUT LEVEL control	: HIGH
INPUT BAL control	: CENTER
DELAY TIME control	: CENTER
BALANCE control	: CENTER

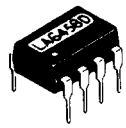
4. Connect the distortion meter to TP-R and adjust the SVR330 to minimize the distortion (arround 1%).
5. Connect the distorition meter to TP-L and adjust the SVR340 to minimize the distortion (arround 1%).



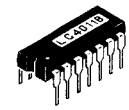
IC BLOCK DIAGRAMS

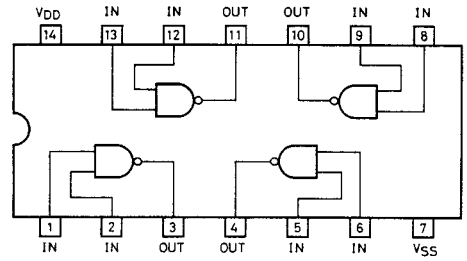
LA6458D (DUAL OPERATIONAL AMP.) IC100/IC101/IC102/IC103/IC320/IC500



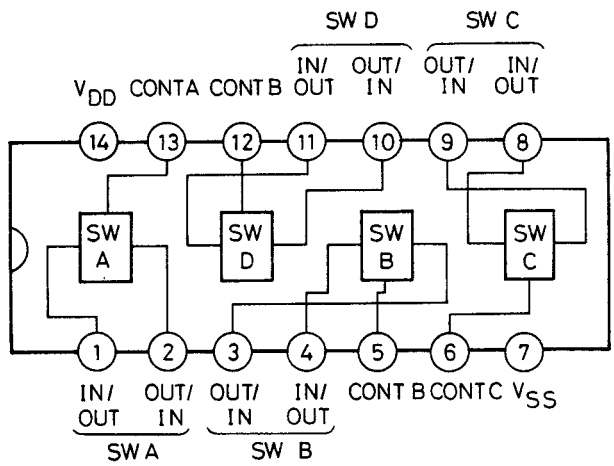


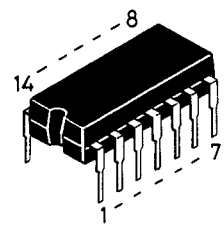
LC4011B (QUAD 2-INPUT NAND GATE) IC104



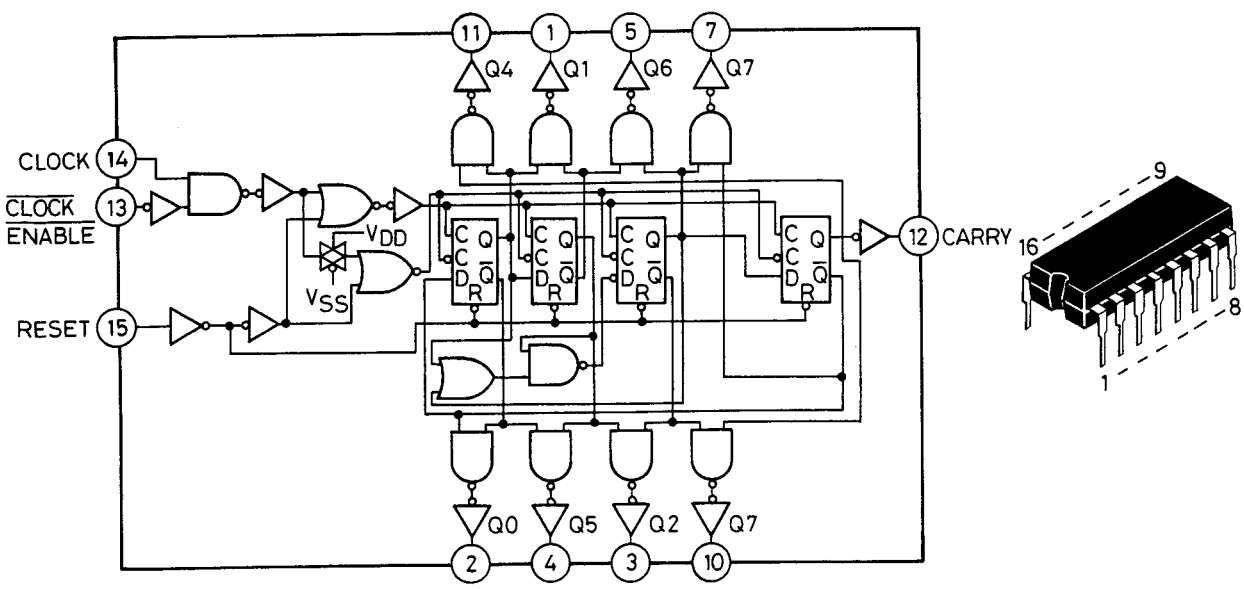


LC4016B (QUAD BILATERAL SWITCH) IC190/IC191



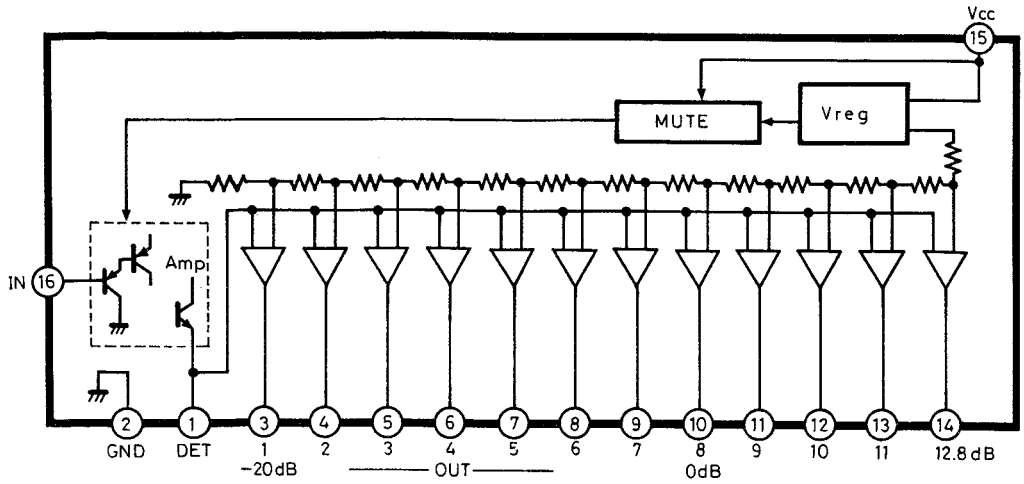


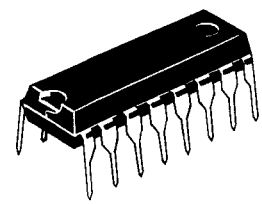
MC14022B (OCTAL COUNTER) IC192



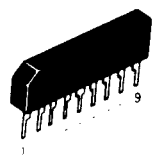
IC BLOCK DIAGRAMS

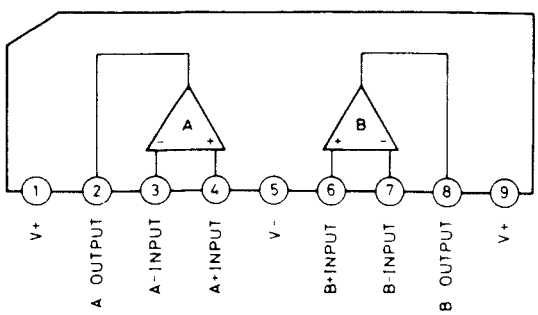
BA6146 (LEVEL METER DRIVER FOR FL) IC193



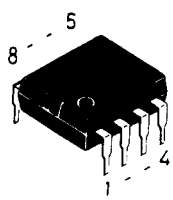


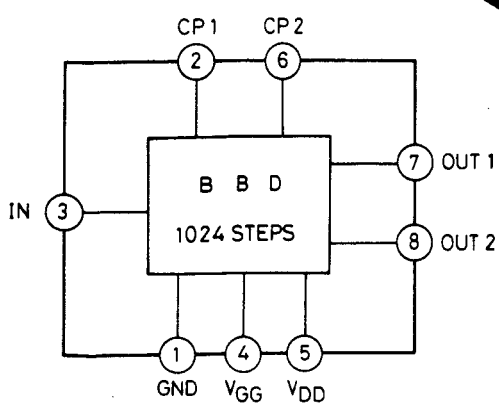
LA6458S (DUAL OPERATIONAL AMP.) IC300/IC310/IC350/IC502/IC701



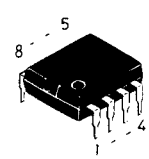


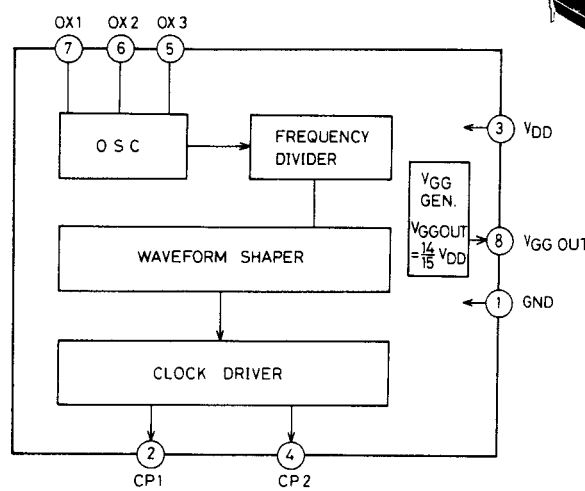
MN3007 (1024 STAGE LOW NOISE BBD) IC330/IC340





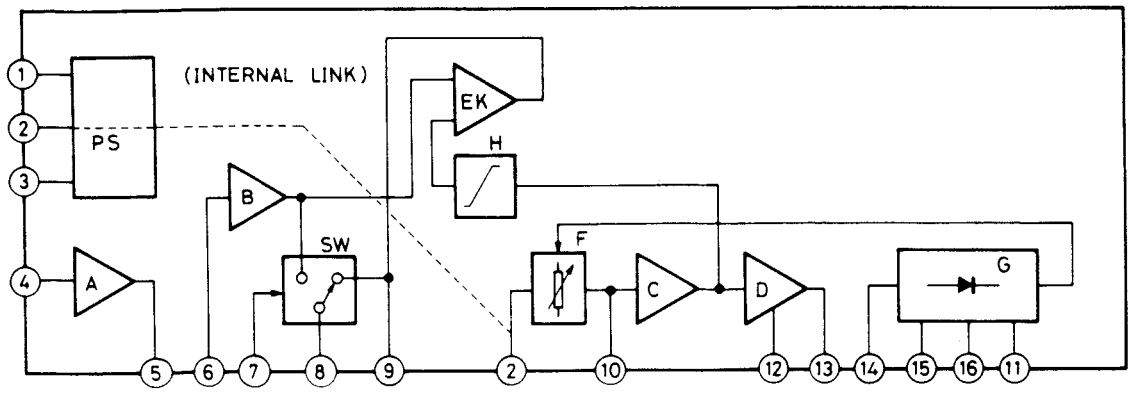
MN3101 (CLOCK GENERATOR/DRIVER FOR BBD) IC450

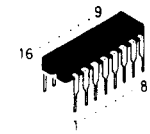




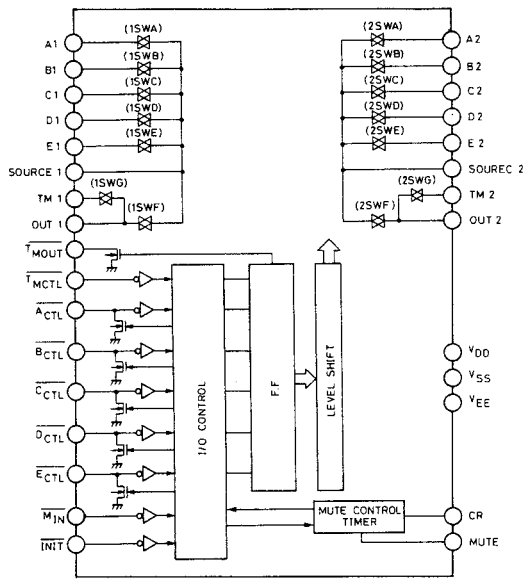
IC BLOCK DIAGRAMS

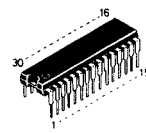
TA7629P (DOLBY NOISE REDUCTION TYPE B) IC421



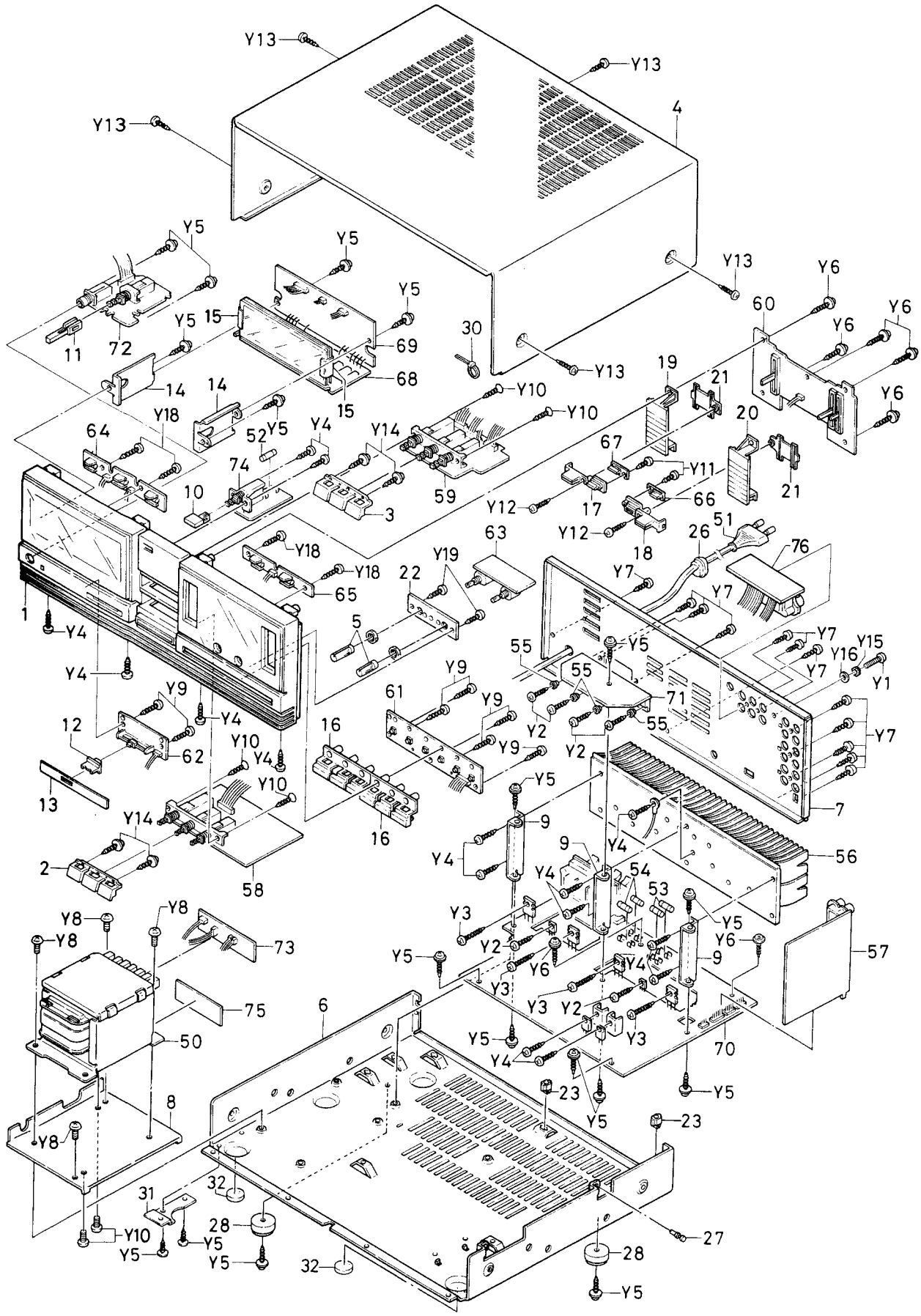


LC7818 (ANALOGUE FUNCTION SWITCH) IC501





CABINET & CHASSIS EXPLODED VIEW



PARTS LIST

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.
Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

PACKING & ACCESSORIES

Ref. No.	Part No.	Description
	141-6-133T-87704	INNER CORR CASE
	141-6-145T-21600	FOAM PLASTIC CASE, LEFT
	141-6-145T-21601	FOAM PLASTIC CASE, RIGHT
	141-6-409T-42105	INST MANUAL
	141-6-235T-55651	INNER POLYE LAMINA COVER, 550X650
or	141-6-235T-55655	INNER POLYE LAMINA COVER, 500X650

CABINET & CHASSIS

Ref. No.	Part No.	Description
1	141-0-122T-67403	FRONT PANEL ASSY
2	141-2-160T-81704	PUSH BUTTON, SURROUND MODE
3	141-2-160T-81707	PUSH BUTTON, LOUD/MUTE/SURROUND
4	141-2-111T-73400	CABINET
5	141-2-165T-09200	ROTARY KNOB, INPUT/DELAY
6	141-2-125T-44201	BOTTOM LID
7	141-2-119T-06010	BACK PANEL
8	141-2-315T-30902	REINFORCEMENT, P.T.
9	141-2-290T-27100	BRACKET, HEAT SINK
10	141-2-160T-60303	PUSH BUTTON, POWER SWITCH
11	141-2-160T-60801	PUSH BUTTON, SPEAKER
12	141-2-164T-41801	SLIDE KNOB, BALANCE
13	141-2-247T-69000	SHEET, BALANCE
14	141-2-290T-26400	BRACKET, FL PCB
15	141-2-448T-38500	CUSHION, FL PROTECTOR
16	141-2-160T-84000	PUSH BUTTON, FUNCTION
17	141-0-156T-39500	CUP KNOB ASSY, SURROUND
18	141-0-156T-39502	CUP KNOB ASSY, VOLUME
19	141-2-210T-83800	BRACKET, SURROUND
20	141-2-210T-83801	BRACKET, VOLUME
21	141-2-253T-48600	JOINT, SURROUND/VOLUME
22	141-2-290T-27900	BRACKET, INPUT/DELAY
23	141-2-210T-08900	BRACKET, MAIN AMP PCB
26	141-2-464T-14400	FIXER, AC POWER CORP
27	141-2-464T-40500	FIXER, FUNCTION PCB MTG
28	141-2-174T-16900	STAND
29	141-2-490T-18430	TUBE, AC COVER 110MM
30	141-2-464T-43100	FIXER, AC COVER
31	141-2-315T-34500	REINFORCEMENT
32	141-2-174T-14002	STAND

FIXING PARTS

Ref. No.	Part No.	Description
Y1	412 003 2804	SPECIAL SCREW
Y2	411 001 8900	BIND HD SCREW 3X8
Y3	411 021 4005	BIND HD 2 TAPPING SCREW 3X12
Y4	411 021 6405	BAND HD 2 TAPPING SCREW 3X8
Y5	411 020 9902	PAN WASHER HD 2 TAPPING SCREW 3X8
Y6	411 020 8905	PAN WASHER HD 2 TAPPING SCREW 3X10
Y7	412 004 3107	SPECIAL SCREW
Y8	411 001 4209	BIND HD 2 TITE SCREW 4X8
Y9	411 021 3503	BIND HD 2 TAPPING SCREW 3X10
Y10	411 021 9604	BIND HD 2 TAPPING SCREW 4X8
Y11	411 023 0203	PAN HD 2 TAPPING SCREW 2.3X6
Y12	411 023 9800	PAN HD 2 TAPPING SCREW 3X8
Y13	411 021 6603	BIND HD 2 TAPPING SCREW 3X8
Y14	411 024 3807	PAN WASHER HD 2 TAPPING SCREW 2X8
Y15	411 008 0402	OUTER TOOTHED LOOK WASHER 3X6.5X0.45T
Y16	411 105 9704	WASHER 3X10X1T
Y17	411 027 3101	BIND HD S TITE SCREW 3X8
Y18	411 021 3701	BIND HD 2 TAPPING SCREW 3X10
Y19	411 022 2802	FLAT HD 2 TAPPING SCREW 3X10

ELECTRICAL PARTS

Ref. No.	Part No.	Description
50	⚠ 4-320T-34400	POWER TRANSFORMER
51	⚠ 4-243T-84973	AC POWER CORD
52	⚠ 4-234T-10590	FUSE, T3.15A 250V (F901)
53	⚠ 4-234T-10588	FUSE, T2.0A 250V (F301/F401)
54	⚠ 4-234T-10591	FUSE, T4.0A 250V (F901/F801)
55	141-2-243T-09800	BASE
56	141-2-368T-33700	HEAT SINK
75	4-290T-39200	P.C BOARD P.T. PRIMARY
	141-2-327T-18200	INSULATOR, Q708/Q808
	123-2-472R-00401	LUG, GROUND
	4-240T-47673	SOCKET, 3P
	4-267T-17175	SOCKET, 5P, TUNER
	4-267T-17178	SOCKET, 8P, G.E.Q.
	4-240T-83572	SOCKET, 2P
	4-240T-83573	SOCKET, 3P
	4-240T-83575	SOCKET, 5P
	4-240T-83576	SOCKET, 6P
	4-240T-83577	SOCKET, 7P
	4-240T-83579	SOCKET, 9P
C13	403 075 4308	CERAMIC 820P K 50V
R1	401 012 3407	CARBON 10 JA 1/4W

FUNCTION PCB ASSY

Ref. No.	Part No.	Description
57	141-4-290T-23571	P.C BOARD ASSY, FUNCTION
	4-240T-50400	SOCKET, RCA 4P TV/CD
	4-240T-50471	SOCKET, RCA 4P PHONO/VCR
	4-240T-18503	SOCKET, 3P
	4-240T-18505	SOCKET, 5P
	4-240T-18507	SOCKET, 7P
	4-267T-52680	SOCKET, 6P, TO FL
	4-267T-51600	SOCKET, 3P, TO SURROUND
	4-236T-32377	PLUG, 7P
S9	4-248T-31200	SWITCH, SURROUND INPUT
RA500	4-221T-10782	RESISTOR, 7P, 100K J
IC500	409 018 4503	IC LA6458DS, DIP08
IC501	409 022 3608	IC LC7818, DIP30
D530	407 007 9904	DIODE GMA01
D531	407 053 8005	ZENER DIODE MTZ7.5B
D532	407 007 9904	DIODE GMA01

PARTS LIST

Ref. No.	Part No.	Description
C40	403 069 8404	CERAMIC 0.01U Z 50V R YF
C41	403 069 8404	CERAMIC 0.01U Z 50V R YF
C500	403 121 8304	ELECT 4.7U M 25V V LR
C501	403 018 6208	CERAMIC 220P J 50V D SL
C502	403 075 4308	CERAMIC 820P K 50V R YB
C503	403 038 8800	ELECT 33U M 6.3V R
C504	403 003 0600	CERAMIC 0.018U K 25V R XR
C505	403 003 9405	CERAMIC 4700P K 25V R XR
C506	403 086 2607	NP-ELECT 1U M 50V V NP
C507	403 061 2905	POLYESTER 3900P M 50V R
C510	403 074 5801	CERAMIC 560P K 50V R YB
C511	403 074 5801	CERAMIC 560P K 50V R YB
C512	403 074 5801	CERAMIC 560P K 50V R YB
C513	403 074 5801	CERAMIC 560P K 50V R YB
C514	403 074 5801	CERAMIC 560P K 50V R YB
C524	403 049 0305	ELECT 1U M 50V R
C530	403 003 6701	CERAMIC 0.033U K 25V R XR
C531	403 044 1901	ELECT 470U M 16V V HA
C532	403 047 0109	ELECT 4.7U M 25V R
C533	403 041 9009	ELECT 10U M 16V R
C534	403 043 9304	ELECT 47U M 16V Y
C535	403 043 9304	ELECT 47U M 16V Y
C536	403 069 8404	CERAMIC 0.01U Z 50V R YF
C537	403 069 8404	CERAMIC 0.01U Z 50V D YF
C600	403 121 8304	ELECT 4.7U M 25V V LR
C601	403 018 6208	CERAMIC 220P J 50V SL
C602	403 075 4308	CERAMIC 820P K 50V R YB
C603	403 038 8800	ELECT 33U M 6.3V R
C604	403 003 0600	CERAMIC 0.018U K 25V R XR
C605	403 003 9405	CERAMIC 4700P K 25V R XR
C606	403 086 2607	NP-ELECT 1U M 50V V NP
C607	403 061 2905	POLYESTER 3900P M 50V R
C610	403 074 5801	CERAMIC 560P K 50V R YB
C611	403 074 5801	CERAMIC 560P K 50V R YB
C612	403 074 5801	CERAMIC 560P K 50V R YB
C613	403 074 5801	CERAMIC 560P K 50V R YB
C614	403 074 5801	CERAMIC 560P K 50V R YB
C624	403 049 0305	ELECT 1U M 50V R
R500	401 024 7004	CARBON 1K JA 1/6W
R501	401 027 0309	CARBON 47K JA 1/6W
R502	401 026 3905	CARBON 330 JA 1/6W
R503	401 026 1604	CARBON 270K JA 1/6W
R504	401 025 1902	CARBON 15K JA 1/6W
R505	401 027 2303	CARBON 560 JA 1/6W
R506	401 024 7707	CARBON 100K JA 1/6W
R510	401 024 7004	CARBON 1K JA 1/6W
R511	401 025 8703	CARBON 220K JA 1/6W
R512	401 024 7004	CARBON 1K JA 1/6W
R513	401 025 8703	CARBON 220K JA 1/6W
R514	401 024 7004	CARBON 1K JA 1/6W
R515	401 024 7004	CARBON 1K JA 1/6W
or	401 025 8703	CARBON 220K JA 1/6W
R516	401 024 7004	CARBON 1K JA 1/6W
R517	401 025 8703	CARBON 220K JA 1/6W
R530	401 027 0309	CARBON 47K JA 1/6W
R531	401 024 8001	CARBON 1M JA 1/6W
R532	401 027 0309	CARBON 47K JA 1/6W
R533	401 024 7400	CARBON 10K JA 1/6W
R570	401 027 0309	CARBON 47K JA 1/6W
R571	401 024 7707	CARBON 100K JA 1/6W
R572	401 025 4606	CARBON 18K JA 1/6W
R600	401 024 7004	CARBON 1K JA 1/6W
R601	401 027 0309	CARBON 47K JA 1/6W
R602	401 026 3905	CARBON 330 JA 1/6W
R603	401 026 1604	CARBON 270K JA 1/6W
R604	401 025 1902	CARBON 15K JA 1/6W
R605	401 027 2303	CARBON 560 JA 1/6W
R606	401 024 7707	CARBON 100K JA 1/6W
R610	401 024 7004	CARBON 1K JA 1/6W
R611	401 025 8703	CARBON 220K JA 1/6W
R612	401 024 7004	CARBON 1K JA 1/6W
R613	401 025 8703	CARBON 220K JA 1/6W
R614	401 024 7004	CARBON 1K JA 1/6W
R615	401 024 7004	CARBON 1K JA 1/6W
or	401 025 8703	CARBON 220K JA 1/6W
R616	401 024 7004	CARBON 1K JA 1/6W
R617	401 025 8703	CARBON 220K JA 1/6W
R670	401 027 0309	CARBON 47K JA 1/6W
R671	401 024 7707	CARBON 100K JA 1/6W
R672	401 025 4606	CARBON 18K JA 1/6W

SURROUND SWITCH PCB ASSY

Ref. No.	Part No.	Description
58	141-4-290T-23600	P.C BOARD ASSY, SURROND SWITCH
	4-267T-52374	SOCKET, 3P TO MAIN
	4-236T-32273	PLUG, 3P
	4-236T-32274	PLUG, 4P
	141-2-382T-21000	TERMINAL
S1~3	4-248T-31000	SWITCH, SURROUND
SVR330	4-222T-97575	SEMI-FIXED RESISTER, 10KB
SVR340	4-222T-97575	SEMI-FIXED RESISTER, 10KB
IC300	409 018 4909	IC LA6458S, SIP9
IC310	409 018 4909	IC LA6458S, SIP9
IC320	409 018 4305	IC LA6458D, DIP08
IC330	409 066 5200	IC MN3007, DIP08
IC340	409 066 5200	IC MN3007, DIP08
IC350	409 018 4909	IC LA6458S, SIP9
IC421	409 049 6002	IC TA7629P, DIP6
IC450	409 066 5309	IC MN3101, DIP08
Q325	405 019 2609	TR 2SC536-F-AUD-SPA
Q330	405 019 2609	TR 2SC536-F-AUD-SPA
Q340	405 019 2609	TR 2SC536-F-AUD-SPA
D450	407 007 9904	DIODE GMA01
C300	403 049 0305	ELECT 1U M 50V R
C301	403 041 9009	ELECT 10U M 16V R
C310	403 049 0305	ELECT 1U M 50V R
C311	403 041 9009	ELECT 10U M 16V R
C312	403 012 4101	CERAMIC 15P J 50V R SL
C313	403 041 9009	ELECT 10U M 16V R
C320	403 047 8600	ELECT 0.1U M 50V R
C321	403 047 8600	ELECT 0.1U M 50V R
C325	403 003 5704	CERAMIC 3300P K 25V XR
C326	403 075 4308	CERAMIC 820P K 50V R YB
C327	403 041 9009	ELECT 10U M 16V R
C330	403 049 0305	ELECT 1U M 50V R
C331	403 069 0705	CERAMIC 1000P K 50V R YB
C332	403 041 9009	ELECT 10U M 16V R
C340	403 049 0305	ELECT 1U M 50V R
C341	403 069 0705	CERAMIC 1000P K 50V R YB
C342	403 041 9009	ELECT 10U M 16V R
C350	403 004 1705	CERAMIC 5600P K 25V R XR
C351	403 075 4308	CERAMIC 820P K 50V R YB
C352	403 003 4202	CERAMIC 2700P K 25V R XR
C353	403 041 9009	ELECT 10U M 16V R
C360	403 004 1705	CERAMIC 5600P K 25V R XR
C361	403 075 4308	CERAMIC 820P K 50V R YB
C362	403 003 4202	CERAMIC 2700P K 25V R XR
C363	403 041 9009	ELECT 10U M 16V R
C400	403 049 0305	ELECT 1U M 50V R
C401	403 041 9009	ELECT 10U M 16V R
C410	403 049 0305	ELECT 1U M 50V R
C411	403 041 9009	ELECT 10U M 16V R
C412	403 012 4101	CERAMIC 15P J 50V R
C413	403 041 9009	ELECT 10U M 16V R
C420	403 041 9009	ELECT 10U M 16V R
C421	403 041 9009	ELECT 10U M 16V Y
C422	403 004 0203	CERAMIC 0.047U J 25V R XR
C423	403 003 9108	CERAMIC 4700P J 25V R XR
C424	403 003 4707	CERAMIC 0.027U J 25V R XR
C425	403 049 0305	ELECT 1U M 50V R
C426	403 049 0305	ELECT 1U M 50V R
C427	403 004 1408	CERAMIC 5600P J 25V R XR
C428	403 047 8600	ELECT 0.1U M 50V R

PARTS LIST

Ref. No.	Part No.	Description
C429	403 048 4403	ELECT 0.33U M 50V R
C430	403 039 6904	ELECT 100U M 10V R
C431	403 041 9009	ELECT 10U M 16V R
C450	403 047 0109	ELECT 4.7U M 25V R
C451	403 009 3100	CERAMIC 100P J 50V SL
C452	403 041 9009	ELECT 10U M 16V R
C453	403 043 9304	ELECT 47U M 16V R
C460	403 043 9304	ELECT 47U M 16V R
C461	403 043 9304	ELECT 47U M 16V R
R300	401 024 7707	CARBON 100K JA 1/6W
R301	401 024 7400	CARBON 10K JA 1/6W
R302	401 024 7400	CARBON 10K JA 1/6W
R304	401 016 3809	CARBON 2.2K JA 1/4W
R305	401 027 5908	CARBON 68K JA 1/6W
R306	401 027 0309	CARBON 47K JA 1/6W
R310	401 012 7009	CARBON 10K JA 1/4W
R311	401 016 4806	CARBON 22K JA 1/4W
R312	401 025 4606	CARBON 18K JA 1/6W
R313	401 017 2801	CARBON 27K JA 1/4W
R314	401 024 7707	CARBON 100K JA 1/6W
R315	401 024 7707	CARBON 100K JA 1/6W
R316	401 024 7400	CARBON 10K JA 1/6W
R317	401 027 0309	CARBON 47K JA 1/6W
R320	401 024 7707	CARBON 100K JA 1/6W
R321	401 024 8001	CARBON 1M JA 1/6W
R322	401 025 0004	CARBON 120K JA 1/6W
R323	401 024 7707	CARBON 100K JA 1/6W
R325	401 013 6407	CARBON 12K JA 1/4W
R326	401 024 9701	CARBON 12K JA 1/6W
R327	401 025 1902	CARBON 15K JA 1/6W
R328	401 027 5502	CARBON 6.8K JA 1/6W
R329	401 024 7400	CARBON 10K JA 1/6W
R330	401 025 8208	CARBON 22K JA 1/6W
R331	401 025 8208	CARBON 22K JA 1/6W
R332	401 025 4606	CARBON 18K JA 1/6W
R333	401 020 2904	CARBON 47K JA 1/4W
R334	401 027 2600	CARBON 5.6K JA 1/6W
R335	401 027 2600	CARBON 5.6K JA 1/6W
R336	401 024 7400	CARBON 10K JA 1/6W
R337	401 024 7400	CARBON 10K JA 1/6W
R340	401 025 8208	CARBON 22K JA 1/6W
R341	401 025 8208	CARBON 22K JA 1/6W
R342	401 025 4606	CARBON 18K JA 1/6W
R343	401 020 2904	CARBON 47K JA 1/4W
R344	401 027 2600	CARBON 5.6K JA 1/6W
R345	401 027 2600	CARBON 5.6K JA 1/6W
R346	401 024 7400	CARBON 10K JA 1/6W
R347	401 024 7400	CARBON 10K JA 1/6W
R350	401 026 7002	CARBON 3.9K JA 1/6W
R351	401 024 9701	CARBON 12K JA 1/6W
R352	401 024 9701	CARBON 12K JA 1/6W
R354	401 024 7400	CARBON 10K JA 1/6W
R355	401 027 0309	CARBON 47K JA 1/6W
R356	401 027 2600	CARBON 5.6K JA 1/6W
R357	401 025 8208	CARBON 22K JA 1/6W
R360	401 026 7002	CARBON 3.9K JA 1/6W
R361	401 024 9701	CARBON 12K JA 1/6W
R362	401 024 9701	CARBON 12K JA 1/6W
R364	401 024 7400	CARBON 10K JA 1/6W
R365	401 027 0309	CARBON 47K JA 1/6W
R366	401 027 5502	CARBON 6.8K JA 1/6W
R367	401 024 7004	CARBON 1K JA 1/6W
R400	401 024 7707	CARBON 100K JA 1/6W
R401	401 024 7400	CARBON 10K JA 1/6W
R402	401 024 7400	CARBON 10K JA 1/6W
R404	401 016 3809	CARBON 2.2K JA 1/4W
R405	401 027 5908	CARBON 68K JA 1/6W
R406	401 027 0309	CARBON 47K JA 1/6W
R410	401 024 7400	CARBON 10K JA 1/6W
R411	401 016 4806	CARBON 22K JA 1/4W
R412	401 025 4606	CARBON 18K JA 1/6W
R413	401 017 2801	CARBON 27K JA 1/4W
R414	401 024 7707	CARBON 100K JA 1/6W
R415	401 024 7707	CARBON 100K JA 1/6W
R416	401 024 7400	CARBON 10K JA 1/6W
R417	401 027 0309	CARBON 47K JA 1/6W
R420	401 026 4308	CARBON 3.3K JA 1/6W
R421	401 027 0309	CARBON 47K JA 1/6W
R422	401 026 3202	CARBON 30K JA 1/6W
R423	401 025 6501	CARBON 20K JA 1/6W
R424	401 027 3003	CARBON 56K JA 1/6W
R425	401 025 6501	CARBON 20K JA 1/6W
R426	401 025 3807	CARBON 180 JA 1/6W
R427	401 026 1604	CARBON 270K JA 1/6W
R428	401 025 4903	CARBON 180K JA 1/6W
R429	401 024 7400	CARBON 10K JA 1/6W
R450	401 025 8208	CARBON 22K JA 1/6W
R451	401 025 8208	CARBON 22K JA 1/6W
R452	401 027 3003	CARBON 56K JA 1/6W
R453	401 018 1209	CARBON 33 JB 1/4W

MUTE/LOUD SWITCH PCB ASSY

Ref. No.	Part No.	Description
59	141-4-290T-23700	P.C BOARD ASSY, MUTE/LOUD SWITCH
	4-267T-52283	SOCKET, 2P TO FL2
S6~8	4-248T-31100	SWITCH, MUTE/LOUD/SURROUND
C580	403 073 6502	CERAMIC 470P K 50V R YB
C581	403 067 5603	MT-COMPO 0.1U J 50V R
C590	403 074 9007	CERAMIC 680P K 50V R YB
C591	403 067 5603	MT-COMPO 0.1U J 50V R
C680	403 073 6502	CERAMIC 470P K 50V R YB
C681	403 067 5603	MT-COMPO 0.1U J 50V R
C690	403 074 9007	CERAMIC 680P K 50V R YB
C691	403 067 5603	MT-COMPO 0.1U J 50V R
R580	401 025 7805	CARBON 2.2K JA 1/6W
R581	401 027 2600	CARBON 5.6K JA 1/6W
R582	401 027 0309	CARBON 47K JA 1/6W
R583	401 026 4605	CARBON 33K JA 1/6W
R584	401 024 8001	CARBON 1M JA 1/6W
R585	401 027 2600	CARBON 5.6K JA 1/6W
R586	401 027 0309	CARBON 47K JA 1/6W
R590	401 025 7805	CARBON 2.2K JA 1/6W
R591	401 027 2600	CARBON 5.6K JA 1/6W
R592	401 027 0309	CARBON 47K JA 1/6W
R593	401 026 4605	CARBON 33K JA 1/6W
R594	401 024 8001	CARBON 1M JA 1/6W
R595	401 027 2600	CARBON 5.6K JA 1/6W
R680	401 025 7805	CARBON 2.2K JA 1/6W
R681	401 027 2600	CARBON 5.6K JA 1/6W
R682	401 027 0309	CARBON 47K JA 1/6W
R683	401 026 4605	CARBON 33K JA 1/6W
R684	401 024 8001	CARBON 1M JA 1/6W
R685	401 027 2600	CARBON 5.6K JA 1/6W
R686	401 027 0309	CARBON 47K JA 1/6W
R690	401 016 3809	CARBON 2.2K JA 1/4W
R691	401 027 2600	CARBON 5.6K JA 1/6W
R692	401 027 0309	CARBON 47K JA 1/6W
R693	401 026 4605	CARBON 33K JA 1/6W
R694	401 024 8001	CARBON 1M JA 1/6W
R695	401 027 2600	CARBON 5.6K JA 1/6W

VOLUME PCB ASSY

Ref. No.	Part No.	Description
60	141-4-290T-23800	P.C BOARD ASSY, VOLUME
	4-267T-42200	SOCKET, 3P, TO MAIN
	4-267T-42300	SOCKET, 3P, TO REAR
VR580	4-220T-44000	VARIABLE RESISTER, 100KW REAR
VR581	4-220T-43900	VARIABLE RESISTER, 100KB MAIN
VR582	4-220T-43900	VARIABLE RESISTER 100KB MAIN
R698	401 021 1906	CARBON 560 JA 1/4W

Ref. No.	Part No.	Description
R699	401 013 5301	CARBON 1.2K JA 1/4W

FUNCTION SWITCH PCB ASSY

Ref. No.	Part No.	Description
61	141-4-290T-23900	P.C BOARD ASSY, FUNCTION SWITCH
	4-267T-52775	SOCKET, 7P, TO FUNCTION
S10	4-238T-70873	SWITCH, TUNER
S11	4-238T-70873	SWITCH, CD
S12	4-238T-70873	SWITCH, TV/AUX1
S13	4-238T-70873	SWITCH, VCR/AUX2
S14	4-238T-70873	SWITCH, PHONO
S15	4-238T-70873	SWITCH, TAPE MONITOR

BALANCE PCB ASSY

Ref. No.	Part No.	Description
62	141-4-290T-24000	P.C BOARD ASSY, BALANCE
VR451	4-220T-42100	VARIABLE RESISTER, 250KG BALANCE

INPUT/DELAY PCB ASSY

Ref. No.	Part No.	Description
63	141-4-290T-24100	P.C BOARD ASSY, INPUT/DELAY
VR300	4-220T-43700	VARIABLE RESISTER, 250KW INPUT BALANCE
VR450	4-220T-43600	VARIABLE RESISTER, 50KB DELAY
R307	401 026 9907	CARBON 4.7K JA 1/6W
R407	401 026 9907	CARBON 4.7K JA 1/6W
R452	401 025 0004	CARBON 120K JA 1/6W
	123-2-472R-00401	LUG

GREEN LED PCB ASSY

Ref. No.	Part No.	Description
66	141-4-290T-24400	P.C BOARD ASSY, GREEN LED
D699	407 033 1101	LED SLP-371E, GREEN

RED LED PCB ASSY

Ref. No.	Part No.	Description
67	141-4-290T-24500	P.C BOARD ASSY, RED LED
D698	407 028 7903	LED SLP-171E, RED

MAIN AMP PCB ASSY

Ref. No.	Part No.	Description
70	141-4-290T-38571	P.C BOARD ASSY, MAIN AMP
	4-237T-11483	TERMINAL BOARD, SPEAKER 8P
	4-267T-19800	SOCKET, CD SYNCRO REC
	4-232T-06300	RELAY
or	4-232T-08000	RELAY
	4-209T-01174	POZISTOR 110° C
	4-236T-32273	PLUG, 3P
	4-236T-10200	PLUG, 3P
	4-236T-10272	PLUG, 5P
	4-236T-10274	PLUG, 7P
	141-2-368T-18700	HEAT SINK
	141-2-381T-04202	BRACKET FUSE
	4-267T-52577	SOCKET, 5P
	4-236T-17900	PLUG, 3P, G.E.Q. POWER
ICP905	⚠ 4-201T-00180	IC-PROTECTOR ICP-N10
ICP906	⚠ 4-201T-00180	IC-PROTECTOR ICP-N10
L701	4-265T-05800	V.H.F COIL
L801	4-265T-05800	V.H.F COIL
SVR701	4-222T-62078	SEMI-FIXED RESISTER 1.5KB
SVR801	4-222T-62078	SEMI-FIXED RESISTER 1.5KB
IC901	⚠ 409 040 1006	IC NJM7815A
IC902	⚠ 409 066 5903	IC NJM7915A
Q701	405 022 5604	TR 2SD1468-S
Q702	405 001 7803	TR 2SA1016-G
Q703	405 001 7803	TR 2SA1016-G
Q704	405 001 7803	TR 2SA1016-G
Q705	405 016 3906	TR 2SC2911-S
Q706	405 016 3906	TR 2SC2911-S
Q707	405 002 9103	TR 2SA1209-S
Q708	405 024 4308	TR 2SD612-F
Q709	⚠ 405 013 9802	TR 2SC2344-E
Q710	⚠ 405 001 6004	TR 2SA1011-E
Q711	⚠ 405 017 7705	TR 2SC3280-O
Q712	⚠ 405 003 3902	TR 2SA1301-O
Q801	405 022 5604	TR 2SD1468-S
Q802	405 001 7803	TR 2SA1016-G
Q803	405 001 7803	TR 2SA1016-G
Q804	405 001 7803	TR 2SA1016-G
Q805	405 016 3906	TR 2SC2911-S
Q806	405 016 3906	TR 2SC2911-S
Q807	405 002 9103	TR 2SA1209-S
Q808	405 024 4308	TR 2SD612-F
Q809	⚠ 405 013 9802	TR 2SC2344-E
Q810	⚠ 405 001 6004	TR 2SA1011-E
Q811	⚠ 405 017 7705	TR 2SC3280-O
Q812	⚠ 405 003 3902	TR 2SA1301-O
Q900	STD438+F++++T	TR 2SD438 F T MP
Q901	405 019 3705	TR 2SC536-G-AUD-SPA
Q970	405 004 5004	TR 2SA608-G-NP
Q971	405 019 3705	TR 2SC536-G-AUD-SPA
Q972	405 019 3705	TR 2SC536-G-AUD-SPA
D701	407 005 4505	DIODE DS442X
D702	407 005 4505	DIODE DS442X
D703	407 005 4505	DIODE DS442X
D801	407 005 4505	DIODE DS442X
D802	407 005 4505	DIODE DS442X
D803	407 005 4505	DIODE DS442X
D901	⚠ 407 003 8703	DIODE DBA60C
D902	⚠ 407 088 6403	DIODE GP15D-L
D903	⚠ 407 088 6403	DIODE GP15D-L
D904	⚠ 407 088 6403	DIODE GP15D-L
D905	⚠ 407 088 6403	DIODE GP15D-L
D911	407 007 9904	DIODE GMA01
D912	407 007 9904	DIODE GMA01
D970	407 007 9904	DIODE GMA01
D972	407 007 9904	DIODE GMA01
D973	407 007 9904	DIODE GMA01
D974	407 007 9904	DIODE GMA01
D975	407 053 5806	ZENER DIODE MTZ4.7B
D976	407 007 9904	DIODE GMA01
D977	407 049 7005	ZENER DIODE GZA15Y
C7	403 057 0403	POLYESTER 0.01U K 50V R
C8	403 057 0403	POLYESTER 0.01U K 50V R
C9	403 057 0403	POLYESTER 0.01U K 50V R
C10	403 057 0403	POLYESTER 0.01U K 50V R
C11	403 062 5103	POLYESTER 5600P K 50V R
C12	403 062 5103	POLYESTER 5600P K 50V R
C14	403 080 6106	POLYPRO 0.01U J 100V M
C17	403 026 5408	CERAMIC 47P K 50V D SL
C18	403 026 5408	CERAMIC 47P K 50V D SL
C19	403 026 5408	CERAMIC 47P K 50V D SL
C20	403 026 5408	CERAMIC 47P K 50V D SL
C701	403 049 0305	ELECT 1U M 50V R
C702	403 015 0407	CERAMIC 180P K 50V R SL
C703	403 061 6507	POLYESTER 470P K 50V R
C704	403 114 0704	CERAMIC 8P K 50V R SL
C705	403 039 6904	ELECT 100U M 10V R

PARTS LIST

Ref. No.	Part No.	Description
C706	403 112 2205	CERAMIC 33P K 500V R SL
C707	403 035 0104	CERAMIC 100P K 500V R SL
C708	403 035 0104	CERAMIC 100P K 500V R SL
C709	403 062 0306	POLYESTER 0.047U K 50V R
C801	403 049 0305	ELECT 1U M 50V R
C802	403 015 0407	CERAMIC 180P K 50V R SL
C803	403 061 6507	POLYESTER 470P K 50V R
C804	403 114 0704	CERAMIC 8P K 50V R SL
C805	403 039 6904	ELECT 100U M 10V R
C806	403 112 2205	CERAMIC 33P K 500V R SL
C807	403 035 0104	CERAMIC 100P K 500V R SL
C808	403 035 0104	CERAMIC 100P K 500V R SL
C809	403 062 0306	POLYESTER 0.047U K 50V R
C901	404 029 3804	POLYPRO 0.022U M 200V
C902	404 029 3804	POLYPRO 0.022U M 200V
C903	⚠ 404 001 7103	ELECT 8200U M 80V
C904	⚠ 404 001 7103	ELECT 8200U M 80V
C905	403 057 0403	POLYESTER 0.01U K 50V R
C906	403 057 0403	POLYESTER 0.01U K 50V R
C907	403 053 4009	ELECT 2200U M 35V Y
C908	403 053 4009	ELECT 2200U M 35V Y
C909	403 041 9009	ELECT 10U M 16V R
C910	403 041 9009	ELECT 10U M 16V R
C918	404 001 7202	ELECT 100U M 100V
C919	404 001 7202	ELECT 100U M 100V V NP
C920	403 086 2607	NP-ELECT 1U M 50V R
C970	403 040 4005	ELECT 220U M 10V R
C971	403 049 0305	ELECT 1U M 50V R
C972	403 049 0305	ELECT 1U M 50V R
C973	403 049 0305	ELECT 1U M 50V R
C974	403 041 9009	ELECT 10U M 16V R
C975	403 069 8404	CERAMIC 0.01U Z 50V R YF
R2	401 012 3407	CARBON 10 JA 1/4W
R3	401 012 3407	CARBON 10 JA 1/4W
R700	401 024 7004	CARBON 1K JA 1/6W
R701	401 024 7707	CARBON 100K JA 1/6W
R702	401 027 5908	CARBON 68K JA 1/6W
R703	401 020 2904	CARBON 47K JA 1/4W
R704	401 020 0801	CARBON 470 JA 1/4W
R705	401 020 2003	CARBON 4.7K JA 1/4W
R706	401 020 2003	CARBON 4.7K JA 1/4W
R707	401 018 2800	CARBON 330 JA 1/4W
R708	401 016 4806	CARBON 22K JA 1/4W
R709	401 016 2604	CARBON 220 JA 1/4W
R710	401 016 9702	CARBON 27 JA 1/4W
R711	401 016 9702	CARBON 27 JA 1/4W
R712	401 022 3107	CARBON 6.8K JA 1/4W
R713	401 022 3107	CARBON 6.8K JA 1/4W
R714	401 016 2307	CARBON 220 JB 1/4W
R715	401 017 2801	CARBON 27K JA 1/4W
R716	401 014 4105	CARBON 1.5K JA 1/4W
R717	401 017 1804	CARBON 2.7K JA 1/4W
R718	⚠ 401 009 9009	CARBON 390 JB 1/2W
R719	⚠ 4-221T-03600	RESISTOR, 0.47 5W X 2
R720	401 058 1108	OXIDE-MT 10 JA 1W
R721	401 062 3907	OXIDE-MT 5.6 JA 1W
R728	401 025 8703	CARBON 220K JA 1/6W
R729	401 025 8703	CARBON 220K JA 1/6W
R730	401 025 8703	CARBON 220K JA 1/6W
R800	401 024 7004	CARBON 1K JA 1/6W
R801	401 024 7707	CARBON 100K JA 1/6W
R802	401 027 5908	CARBON 68K JA 1/6W
R803	401 020 2904	CARBON 47K JA 1/4W
R804	401 020 0801	CARBON 470 JA 1/4W
R805	401 020 2003	CARBON 4.7K JA 1/4W
R806	401 020 2003	CARBON 4.7K JA 1/4W
R807	401 018 2800	CARBON 330 JA 1/4W
R808	401 016 4806	CARBON 22K JA 1/4W
R809	401 016 2604	CARBON 220 JA 1/4W
R810	401 016 9702	CARBON 27 JA 1/4W
R811	401 016 9702	CARBON 27 JA 1/4W
R812	401 022 3107	CARBON 6.8K JA 1/4W
R813	401 022 3107	CARBON 6.8K JA 1/4W
R814	401 016 2307	CARBON 220 JB 1/4W
R815	401 017 2801	CARBON 27K JA 1/4W
R816	401 014 4105	CARBON 1.5K JA 1/4W
R817	401 017 1804	CARBON 2.7K JA 1/4W
R818	⚠ 401 009 9009	CARBON 390 JB 1/2W
R819	⚠ 4-221T-03600	RESISTOR, 0.47 5W X 2
R820	401 058 1108	OXIDE-MT 10 JA 1W
R821	401 062 3907	OXIDE-MT 5.6 JA 1W
R828	401 025 8703	CARBON 220K JA 1/6W
R829	401 025 8703	CARBON 220K JA 1/6W
R830	401 025 8703	CARBON 220K JA 1/6W
R900	401 058 2501	OXIDE-MT 100 JA 1W
R901	401 024 7400	CARBON 10K JA 1/6W
R902	401 025 1902	CARBON 15K JA 1/6W
R904	401 018 1209	CARBON 33 JB 1/4W
R905	401 018 1209	CARBON 33 JB 1/4W
R906	401 024 7707	CARBON 100K JA 1/6W
R970	401 027 0309	CARBON 47K JA 1/6W
R971	401 027 0309	CARBON 47K JA 1/6W
R972	⚠ 401 066 5204	OXIDE-MT 22 JA 2W
R973	⚠ 401 067 8204	OXIDE-MT 39 JA 2W
R974	401 017 2801	CARBON 27K JA 1/4W
R975	401 025 7805	CARBON 2.2K JA 1/6W
R976	401 027 3003	CARBON 56K JA 1/6W
R977	401 026 1307	CARBON 27K JA 1/6W
R978	401 026 1307	CARBON 27K JA 1/6W
R979	401 024 7400	CARBON 10K JA 1/6W
R980	401 027 0309	CARBON 47K JA 1/6W
R981	401 024 7400	CARBON 10K JA 1/6W
R982	401 024 6700	CARBON 100 JA 1/6W
R983	401 020 1709	CARBON 4.7K JB 1/4W
R984	401 020 1709	CARBON 4.7K JB 1/4W

REAR AMP PCB ASSY

Ref. No.	Part No.	Description
71	141-4-290T-38600	P.C BOARD ASSY, REAR AMP
	4-236T-32373	PLUG, 3P
SVR370	4-222T-73595	SEMI-FIXED RESISTER, 150B
SVR470	4-222T-73595	SEMI-FIXED RESISTER, 150B
Q370	405 022 5604	TR 2SD1468-S
Q371	405 002 0605	TR 2SA1038-S
Q372	405 001 7803	TR 2SA1016-G
Q373	405 001 7803	TR 2SA1016-G
Q374	405 001 7803	TR 2SA1016-G
Q375	STC2362G++++T	TR 2SC2362 G T NP
Q376	405 013 7204	TR 2SC2274K-E
Q377	405 006 7006	TR 2SA984K-E
Q378	405 017 6708	TR 2SC3179-Y
Q379	405 003 3506	TR 2SA1262-Y
Q470	405 022 5604	TR 2SD1468-S
Q471	405 002 0605	TR 2SA1038-S
Q472	405 001 7803	TR 2SA1016-G
Q473	405 001 7803	TR 2SA1016-G
Q474	405 001 7803	TR 2SA1016-G
Q475	STC2362G++++T	TR 2SC2362 G T NP
Q476	405 013 7204	TR 2SC2274K-E
Q477	405 006 7006	TR 2SA984K-E
Q478	405 017 6708	TR 2SC3179-Y
Q479	405 003 3506	TR 2SA1262-Y
D370	407 007 9904	DIODE GMA01
D371	407 007 9904	DIODE GMA01
D372	407 007 9904	DIODE GMA01
D373	407 007 9904	DIODE GMA01
D374	407 007 9904	DIODE GMA01
D375	407 007 9904	DIODE GMA01
D472	407 007 9904	DIODE GMA01
D473	407 007 9904	DIODE GMA01
D474	407 007 9904	DIODE GMA01
D475	407 007 9904	DIODE GMA01
C1	403 009 8105	CERAMIC 100P K 50V R SL
C2	403 009 8105	CERAMIC 100P K 50V R SL

PARTS LIST

Ref. No.	Part No.	Description
C3	403 069 8404	CERAMIC 0.01U Z 50V
C4	403 069 8404	CERAMIC 0.01U Z 50V
C5	403 009 8105	CERAMIC 100P K 50V R SL
C370	403 026 8201	CERAMIC 470P K 50V R SL
C371	403 049 0305	ELECT 1U M 50V R
C372	403 039 6904	ELECT 100U M 10V R
C373	403 041 2307	ELECT 47U M 10V R
C374	403 031 0306	CERAMIC 68P K 50V R SL
C375	403 069 8404	CERAMIC 0.01U Z 50V
C376	403 062 1105	POLYESTER 0.047U M 50V R
C377	403 053 2708	ELECT 220U M 35V Y
C378	403 053 2708	ELECT 220U M 35V Y
C470	403 026 8201	CERAMIC 470P K 50V R SL
C471	403 049 0305	ELECT 1U M 50V R
C472	403 039 6904	ELECT 100U M 10V R
C473	403 041 2307	ELECT 47U M 10V R
C474	403 031 0306	CERAMIC 68P K 50V R SL
C475	403 069 8404	CERAMIC 0.01U Z 50V
C476	403 062 1105	POLYESTER 0.047U M 50V R
R370	401 024 7004	CARBON 1K JA 1/6W
R371	401 027 5908	CARBON 68K JA 1/6W
R372	401 025 1605	CARBON 1.5K JA 1/6W
R373	401 027 2303	CARBON 560 JA 1/6W
R374	401 027 5205	CARBON 680 JA 1/6W
R375	401 024 7004	CARBON 1K JA 1/6W
R376	401 022 4104	CARBON 68K JA 1/4W
R377	401 025 1308	CARBON 150 JA 1/6W
R378	401 026 9303	CARBON 47 JA 1/6W
R379	401 020 0405	CARBON 470 JB 1/4W
R380	401 057 5206	OXIDE-MT 0.47 JA 1W
R381	401 057 5206	OXIDE-MT 0.47 JA 1W
R382	401 010 5601	CARBON 5.6 JB 1/2W
R383	401 023 0303	CARBON 82 JB 1/4W
R384	401 023 0303	CARBON 82 JB 1/4W
R385	401 025 8208	CARBON 22K JA 1/6W
R470	401 024 7004	CARBON 1K JA 1/6W
R471	401 027 5908	CARBON 68K JA 1/6W
R472	401 025 1605	CARBON 1.5K JA 1/6W
R473	401 027 2303	CARBON 560 JA 1/6W
R474	401 027 5205	CARBON 680 JA 1/6W
R475	401 024 7004	CARBON 1K JA 1/6W
R476	401 022 4104	CARBON 68K JA 1/4W
R477	401 025 1308	CARBON 150 JA 1/6W
R478	401 026 9303	CARBON 47 JA 1/6W
R479	401 020 0405	CARBON 470 JB 1/4W
R480	401 057 5206	OXIDE-MT 0.47 JA 1W
R481	401 057 5206	OXIDE-MT 0.47 JA 1W
R482	401 010 5601	CARBON 5.6 JB 1/2W

SPEAKER SWITCH PCB ASSY

Ref. No.	Part No.	Description
72	141-4-290T-38700	P.C BOARD ASSY, SPEAKER SWITCH
	4-240T-63071	SOCKET, HEADPHONE
	4-236T-32275	PLUG, 5P
S5	4-248T-30900	SWITCH, SPEAKER
Q770	405 022 5604	TR 2SD1468-S
Q870	405 022 5604	TR 2SD1468-S
C770	403 018 8509	CERAMIC 220P K 50V
C870	403 018 8509	CERAMIC 220P K 50V
R722	401 069 2804	OXIDE-MT 680 JA 2W
R770	401 027 5502	CARBON 6.8K JA 1/6W
R771	401 021 0701	CARBON 56 JA 1/4W
R822	401 069 2804	OXIDE-MT 680 JA 2W
R870	401 027 5502	CARBON 6.8K JA 1/6W
R871	401 021 0701	CARBON 56 JA 1/4W

P.T. SECONDARY PCB ASSY

Ref. No.	Part No.	Description
73	141-4-290T-39071	P.C BOARD ASSY, P.T. SECONDARY
	4-236T-32372	PLUG, 2P
R907	⚠ 402 004 3801	FUSIBLE RES 1 J- 1/4W
R908	⚠ 402 004 5300	FUSIBLE RES 2.2 J- 1/4W
R964	⚠ 401 064 1307	OXIDE-MT 0.33 JA 2W
R965	⚠ 401 064 1307	OXIDE-MT 0.33 JA 2W

POWER SWITCH PCB ASSY

Ref. No.	Part No.	Description
74	141-4-290T-39100	P.C BOARD ASSY, POWER SWITCH
	141-2-381T-04202	BRACKET FUSE
	4-237T-00100	TERMINAL BOARD
	141-2-382T-18900	TERMINAL
S4	⚠ 4-248T-30780	SWITCH, POWER
C900	⚠ 404 033 3302	CERAMIC 0.01U M -

TAPE TUN SOCKET PCB ASSY

Ref. No.	Part No.	Description
76	141-4-290T-17701	P.C BOARD ASSY,
	4-240T-50572	SOCKET, DECK TU
	4-267T-19800	SOCKET, SYNCRO REC
C793	403 071 5606	CERAMIC 220P K 50V
C794	403 071 5606	CERAMIC 220P K 50V
C795	403 071 5606	CERAMIC 220P K 50V
C893	403 071 5606	CERAMIC 220P K 50V
C894	403 071 5606	CERAMIC 220P K 50V
C895	403 071 5606	CERAMIC 220P K 50V
R793	401 024 7004	CARBON 1K JA 1/6W
R794	401 024 7004	CARBON 1K JA 1/6W
R795	401 024 7004	CARBON 1K JA 1/6W
R893	401 024 7004	CARBON 1K JA 1/6W
R894	401 024 7004	CARBON 1K JA 1/6W
R895	401 024 7004	CARBON 1K JA 1/6W

PL LEFT PCB ASSY

Ref. No.	Part No.	Description
64	141-4-290T-24200	P.C BOARD ASSY, PL LEFT
	4-612T-17500	LAMP, 12V 70MA
	141-2-329T-09300	REFLECTOR
	4-267T-52275	SOCKET, 2P TO P.T.

PL RIGHT PCB ASSY

Ref. No.	Part No.	Description
65	141-4-290T-24300	P.C BOARD ASSY, PL RIGHT
	4-612T-17500	LAMP, 12V, 70MA
	141-2-329T-09300	REFLECTOR

FL1 PCB ASSY

Ref. No.	Part No.	Description
68	141-4-290T-35500	P.C BOARD ASSY, FL 1
	4-985T-04100	FLUORESCENT DISPLAY
	141-2-322T-42000	SHIELD PLATE
	4-267T-52284	SOCKET, 2P
	4-267T-52485	SOCKET, 4P
RA190	4-221T-10986	RESISTOR, 9P, 22K J
RA191	4-221T-10986	RESISTOR, 9P, 22K J
RA192	4-221T-10486	RESISTOR, 4P, 22K J
IC190	409 020 7509	IC LC4016B DIP14
IC191	409 020 7509	IC LC4016B DIP14

PARTS LIST

Ref. No.	Part No.	Description
IC192	409 066 4609	IC MC14022BCP
IC193	409 003 0701	IC BA6146
IC194	409 020 0302	IC LB1290 DIP18
IC195	409 020 0401	IC LB1292 DIP16
IC196	409 020 0401	IC LB1292 DIP16
D100	407 007 9904	DIODE GMA01
D101	407 007 9904	DIODE GMA01
D102	407 007 9904	DIODE GMA01
D103	407 007 9904	DIODE GMA01
D104	407 007 9904	DIODE GMA01
D105	407 007 9904	DIODE GMA01
D106	407 007 9904	DIODE GMA01
D107	407 007 9904	DIODE GMA01
D108	407 007 9904	DIODE GMA01
D109	407 005 4505	DIODE DS442X
D110	407 007 9904	DIODE GMA01
D111	407 005 4505	DIODE DS442X
D112	407 005 4505	DIODE DS442X
D113	407 007 9904	DIODE GMA01
D114	407 007 9904	DIODE GMA01
D115	407 007 9904	DIODE GMA01
D116	407 007 9904	DIODE GMA01
D117	407 007 9904	DIODE GMA01
D118	407 005 4505	DIODE DS442X
D119	407 005 4505	DIODE DS442X
D120	407 007 9904	DIODE GMA01
D121	407 005 4505	DIODE DS442X
D122	407 005 4505	DIODE DS442X
D123	407 005 4505	DIODE DS442X
D124	407 007 9904	DIODE GMA01
D125	407 005 4505	DIODE DS442X
D126	407 007 9904	DIODE GMA01
D127	407 005 4505	DIODE DS442X
D128	407 005 4505	DIODE DS442X
D129	407 005 4505	DIODE DS442X
D130	407 007 9904	DIODE GMA01
D131	407 005 4505	DIODE DS442X
D132	407 007 9904	DIODE GMA01
D133	407 005 4505	DIODE DS442X
D134	407 007 9904	DIODE GMA01
D135	407 007 9904	DIODE GMA01
D136	407 007 9904	DIODE GMA01
D137	407 007 9904	DIODE GMA01
D138	407 005 4505	DIODE DS442X
D139	407 007 9904	DIODE GMA01
D140	407 005 4505	DIODE DS442X
D141	407 005 4505	DIODE DS442X
D142	407 005 4505	DIODE DS442X
D143	407 005 4505	DIODE DS442X
D149	407 050 0903	ZENER DIODE GZA3.3X
R190	401 027 0309	CARBON 47K JA 1/6W
R191	401 025 4200	CARBON 1.8K JA 1/6W
R192	401 024 7400	CARBON 10K JA 1/6W
R193	401 025 8208	CARBON 22K JA 1/6W
R194	401 025 8208	CARBON 22K JA 1/6W
R195	401 025 8208	CARBON 22K JA 1/6W
R196	401 021 0701	CARBON 56 JA 1/4W
R197	401 021 0701	CARBON 56 JA 1/4W

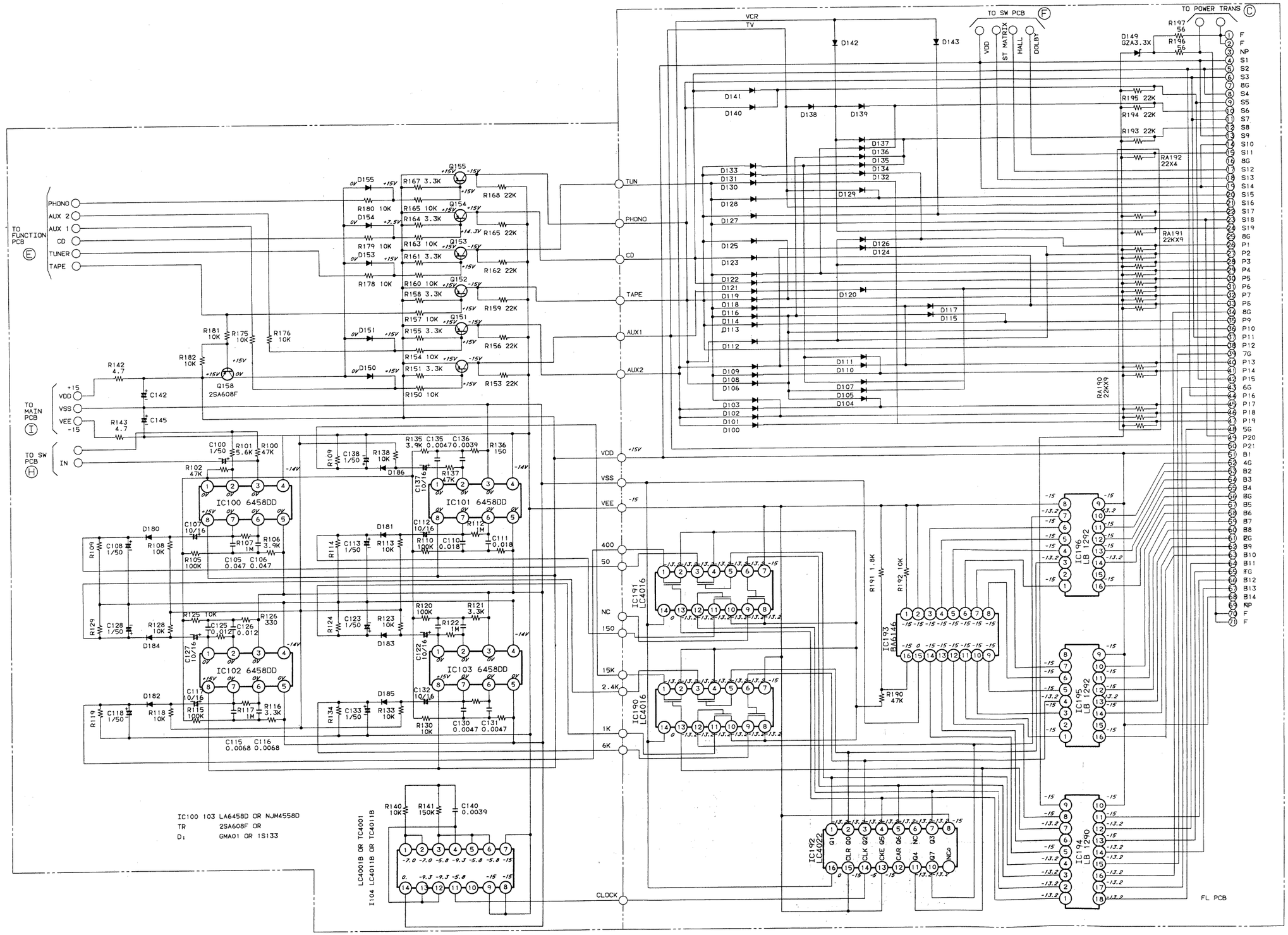
FL2 PCB ASSY

Ref. No.	Part No.	Description
67	141-4-290T-35600	P.C BOARD ASSY, FL 2
	4-267T-52386	SOCKET, 3P, TO MAIN
	4-236T-32372	PLUG, 2P
	4-236T-32276	PLUG, 6P
IC100	409 018 4305	IC LA6458D, DIP08
IC101	409 018 4305	IC LA6458D, DIP08
IC102	409 018 4305	IC LA6458D, DIP08
IC103	409 018 4305	IC LA6458D, DIP08
IC104	409 020 6908	IC LC4011B, DIP14

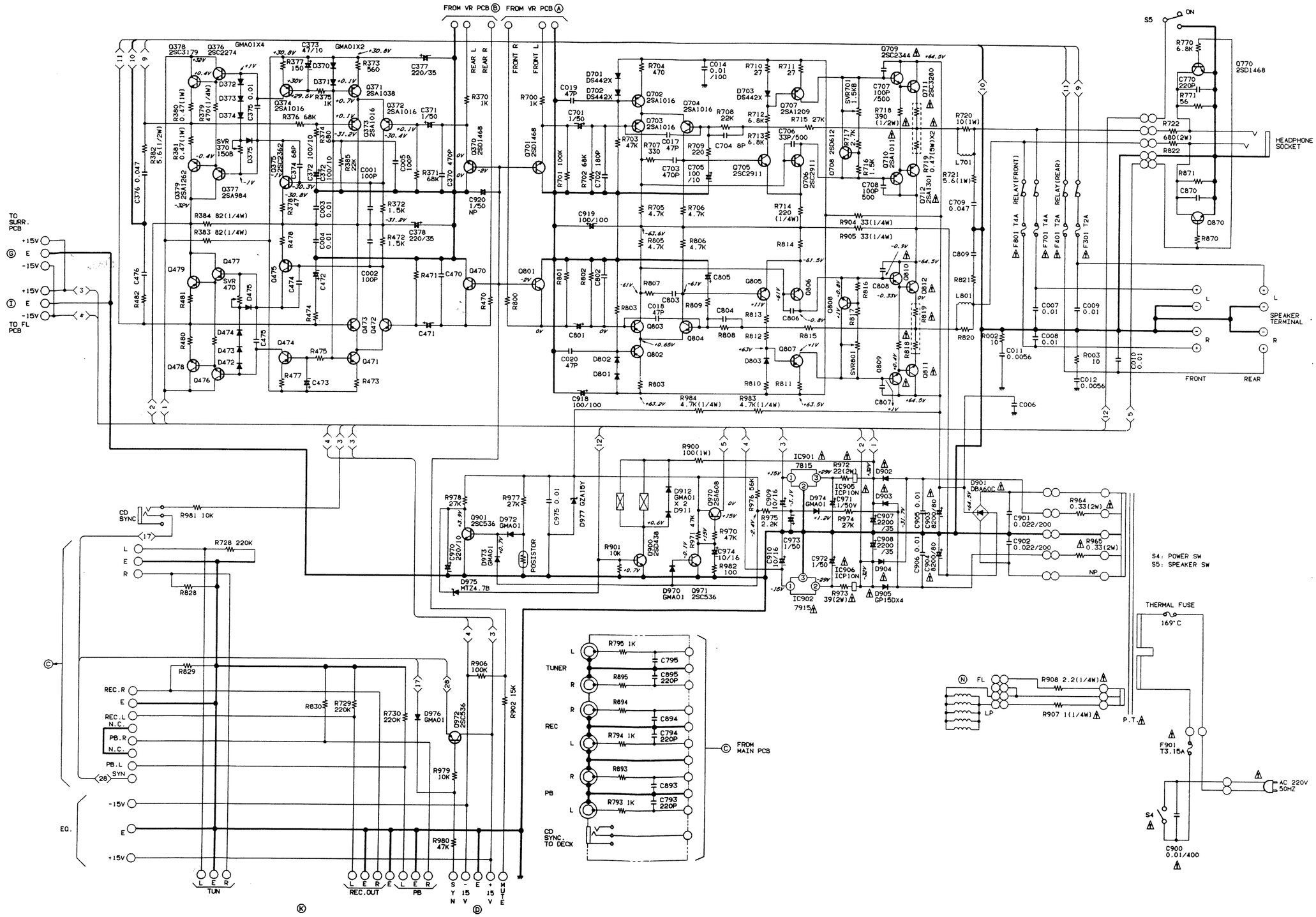
Ref. No.	Part No.	Description
Q150	405 004 5103	TR 2SA608-G-SPA
Q151	405 004 5103	TR 2SA608-G-SPA
Q152	405 004 5103	TR 2SA608-G-SPA
Q153	405 004 5103	TR 2SA608-G-SPA
Q154	405 004 5103	TR 2SA608-G-SPA
Q155	405 004 5103	TR 2SA608-G-SPA
Q158	405 004 5103	TR 2SA608-G-SPA
D150	407 007 9904	DIODE GMA01
D151	407 007 9904	DIODE GMA01
D153	407 007 9904	DIODE GMA01
D154	407 007 9904	DIODE GMA01
D155	407 007 9904	DIODE GMA01
D180	407 007 9904	DIODE GMA01
D181	407 007 9904	DIODE GMA01
D182	407 007 9904	DIODE GMA01
D183	407 007 9904	DIODE GMA01
D184	407 007 9904	DIODE GMA01
D185	407 007 9904	DIODE GMA01
D186	407 007 9904	DIODE GMA01
C100	403 049 0305	ELECT 1U M 50V R
C105	403 004 0500	CERAMIC 0.047U K 25V XR
C106	403 004 0500	CERAMIC 0.047U K 25V XR
C107	403 041 9009	ELECT 10U M 16V R
C108	403 049 0305	ELECT 1U M 50V R
C110	403 003 0600	CERAMIC 0.018U K 25V XR
C111	403 003 0600	CERAMIC 0.018U K 25V XR
C112	403 041 9009	ELECT 10U M 16V R
C113	403 049 0305	ELECT 1U M 50V R
C115	403 004 3303	CERAMIC 6800P K 25V XR
C116	403 004 3303	CERAMIC 6800P K 25V XR
C117	403 041 9009	ELECT 10U M 16V R
C118	403 049 0305	ELECT 1U M 50V R
C120	403 003 4202	CERAMIC 2700P K 25V XR
C121	403 003 4202	CERAMIC 2700P K 25V XR
C122	403 041 9009	ELECT 10U M 16V R
C123	403 049 0305	ELECT 1U M 50V R
C125	403 002 6207	CERAMIC 0.012U K 25V XR
C126	403 002 6207	CERAMIC 0.012U K 25V XR
C127	403 041 9009	ELECT 10U M 16V R
C128	403 049 0305	ELECT 1U M 50V R
C130	403 003 9405	CERAMIC 4700P K 25V XR
C131	403 003 9405	CERAMIC 4700P K 25V XR
C132	403 041 9009	ELECT 10U M 16V R
C133	403 049 0305	ELECT 1U M 50V R
C135	403 003 9405	CERAMIC 4700P K 25V XR
C136	403 003 7807	CERAMIC 3900P K 25V XR
C137	403 041 9009	ELECT 10U M 16V R
C138	403 049 0305	ELECT 1U M 50V R
C140	403 003 7401	CERAMIC 3900P J 25V XR
C142	403 043 6006	ELECT 330U M 16V HA F
C145	403 043 6006	ELECT 330U M 16V HA F
R100	401 027 0309	CARBON 47K JA 1/6W
R101	401 027 2600	CARBON 5.6K JA 1/6W
R102	401 027 0309	CARBON 47K JA 1/6W
R105	401 024 7707	CARBON 100K JA 1/6W
R106	401 026 7002	CARBON 3.9K JA 1/6W
R107	401 024 8001	CARBON 1M JA 1/6W
R108	401 024 7400	CARBON 10K JA 1/6W
R110	401 024 7707	CARBON 100K JA 1/6W
R111	401 026 7002	CARBON 3.9K JA 1/6W
R112	401 024 8001	CARBON 1M JA 1/6W
R113	401 024 7400	CARBON 10K JA 1/6W
R115	401 024 7707	CARBON 100K JA 1/6W
R116	401 026 4308	CARBON 3.3K JA 1/6W
R117	401 024 8001	CARBON 1M JA 1/6W
R118	401 024 7400	CARBON 10K JA 1/6W
R120	401 024 7707	CARBON 100K JA 1/6W
R121	401 026 4308	CARBON 3.3K JA 1/6W
R122	401 024 8001	CARBON 1M JA 1/6W
R123	401 024 7400	CARBON 10K JA 1/6W
R125	401 024 7400	CARBON 10K JA 1/6W
R126	401 026 3905	CARBON 330 JA 1/6W
R127	401 024 7707	CARBON 100K JA 1/6W
R128	401 024 7400	CARBON 10K JA 1/6W

PARTS LIST

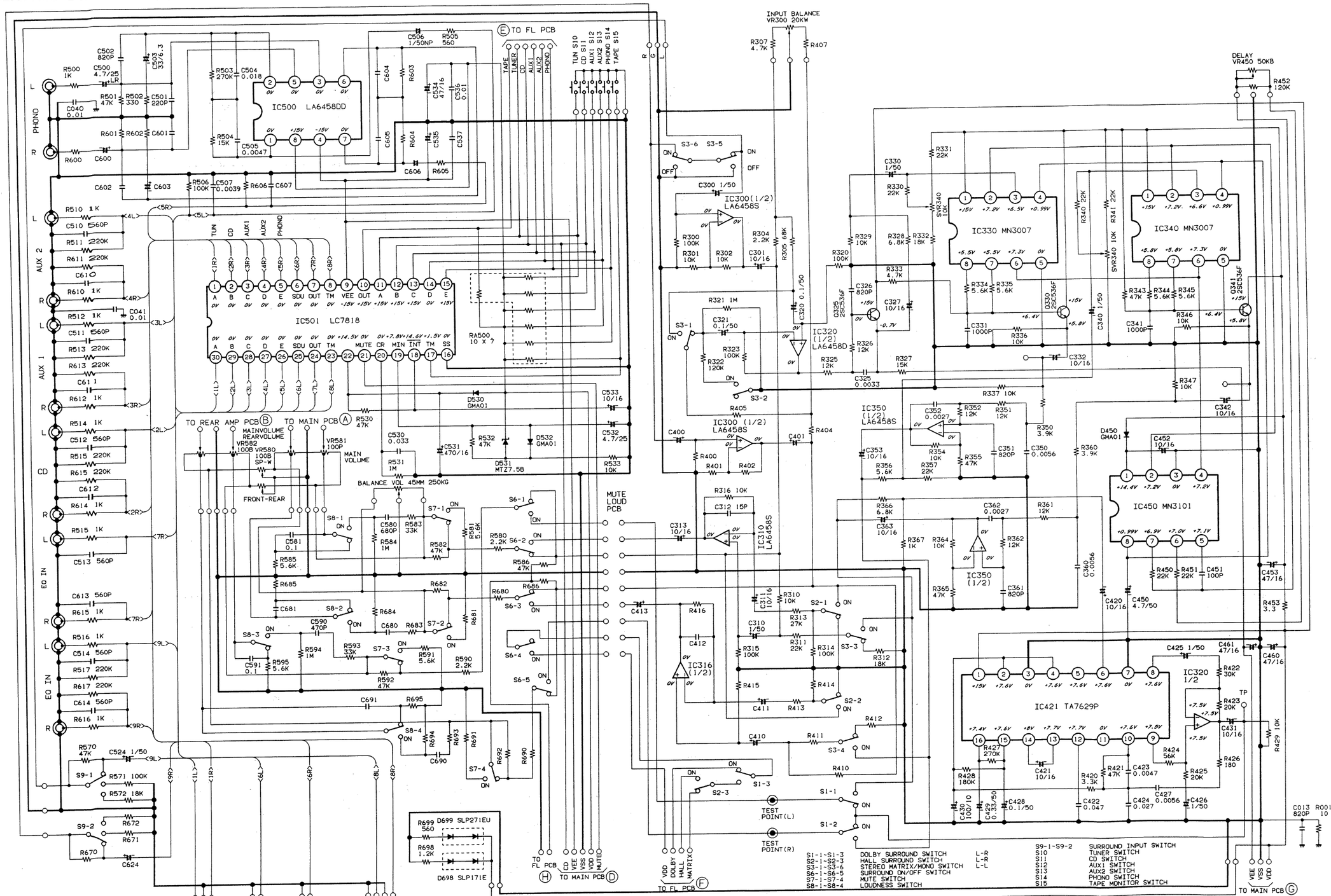
Ref. No.	Part No.	Description
R130	401 024 7400	CARBON 10K JA 1/6W
R131	401 026 3905	CARBON 330 JA 1/6W
R132	401 024 7707	CARBON 100K JA 1/6W
R133	401 024 7400	CARBON 10K JA 1/6W
R135	401 026 7002	CARBON 3.9K JA 1/6W
R136	401 025 1308	CARBON 150 JA 1/6W
R137	401 027 0309	CARBON 47K JA 1/6W
R138	401 024 7400	CARBON 10K JA 1/6W
R140	401 024 7400	CARBON 10K JA 1/6W
R141	401 025 2305	CARBON 150K JA 1/6W
R142	401 019 6203	CARBON 4.7 JA 1/4W
R143	401 019 6203	CARBON 4.7 JA 1/4W
R150	401 024 7400	CARBON 10K JA 1/6W
R151	401 026 4308	CARBON 3.3K JA 1/6W
R153	401 025 8208	CARBON 22K JA 1/6W
R154	401 024 7400	CARBON 10K JA 1/6W
R155	401 026 4308	CARBON 3.3K JA 1/6W
R156	401 025 8208	CARBON 22K JA 1/6W
R157	401 024 7400	CARBON 10K JA 1/6W
R158	401 026 4308	CARBON 3.3K JA 1/6W
R159	401 025 8208	CARBON 22K JA 1/6W
R160	401 024 7400	CARBON 10K JA 1/6W
R161	401 026 4308	CARBON 3.3K JA 1/6W
R162	401 025 8208	CARBON 22K JA 1/6W
R163	401 024 7400	CARBON 10K JA 1/6W
R164	401 026 4308	CARBON 3.3K JA 1/6W
R165	401 025 8208	CARBON 22K JA 1/6W
R166	401 024 7400	CARBON 10K JA 1/6W
R167	401 026 4308	CARBON 3.3K JA 1/6W
R168	401 025 8208	CARBON 22K JA 1/6W
R175	401 024 7400	CARBON 10K JA 1/6W
R176	401 024 7400	CARBON 10K JA 1/6W
R178	401 024 7400	CARBON 10K JA 1/6W
R179	401 024 7400	CARBON 10K JA 1/6W
R180	401 024 7400	CARBON 10K JA 1/6W
R181	401 024 7400	CARBON 10K JA 1/6W
R182	401 024 7400	CARBON 10K JA 1/6W


TO FUNCTION PCB (E)
PHONO
AUX 2
AUX 1
CD
TUNER
TAPE
TO MAIN PCB (I)
+15
VDD
VSS
VEE
-15
TO SW PCB (H)
IN
TUN
PHONO
CD
TAPE
AUX1
AUX2
VDD
VSS
VEE
400
50
NC
150
15K
2.4K
1K
6K
CLOCK
VCR
TV
TO SW PCB (F)
VDD
ST MATRIX
HALL
DOLBY
TO POWER TRANS (C)
IC100 6458DD
IC101 6458DD
IC102 6458DD
IC103 6458DD
IC191 LC4016
IC190 LC4016
IC192 LC4022
IC193 BA6146
IC196 LB 1292
IC195 LB 1292
IC194 LB 1290
RA192 22X4
RA191 22KX9
RA190 22KX9
Q158 2SA608F
FL PCB
IC100 103 LA6458D OR NJM4558D
TR 2SA608F OR
D1 GMA01 OR 1S133
LC4001B OR TC4001
I104 LC4011B OR TC4011B

SCHEMATIC DIAGRAM (2)

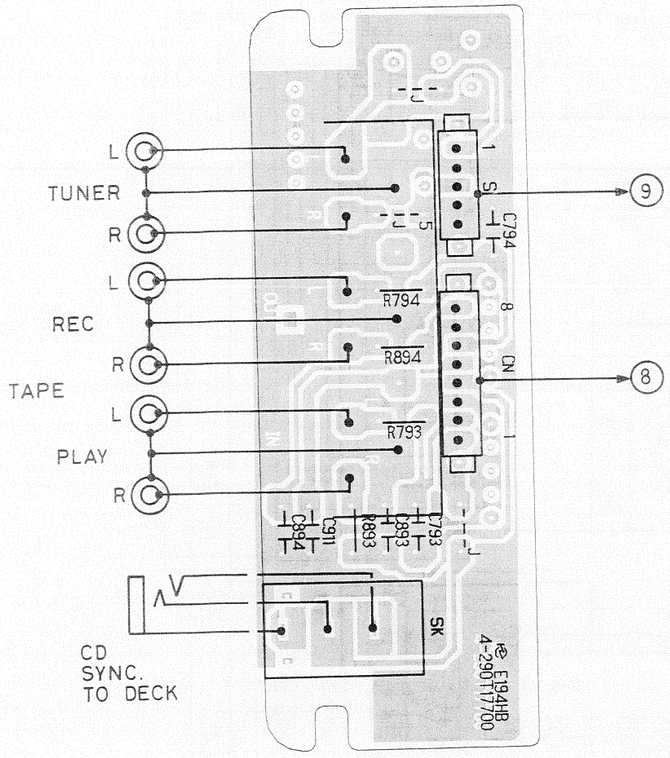


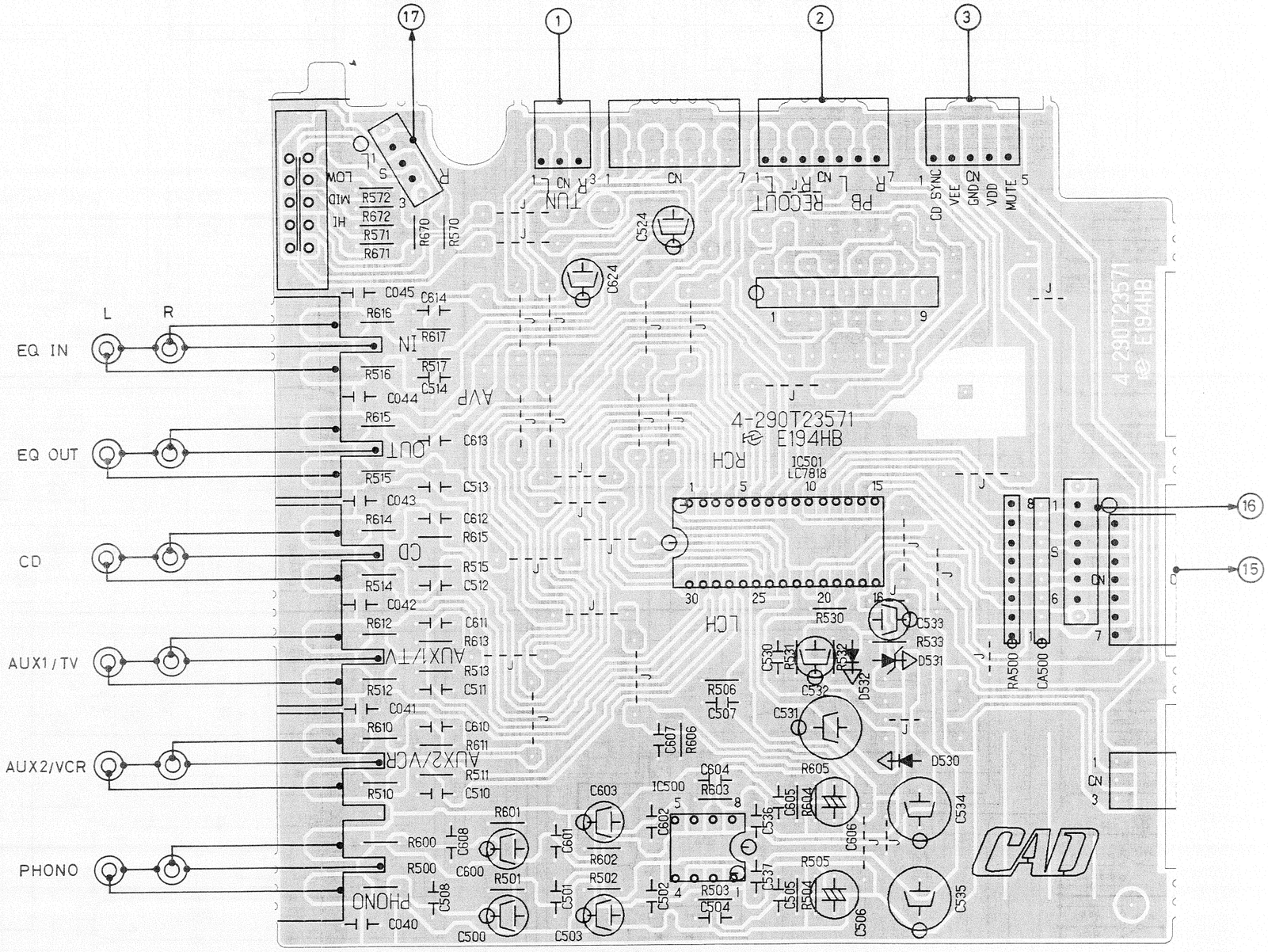
SCHEMATIC DIAGRAM (3)



PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.
Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.





FUNCTION PCB

VOLUME PCB

POWER SWITCH PCB

INPUT/DELAY PCB

MUTE/LOUD SWITCH PCB

GREEN LED PCB

RED LED PCB

SURROUND SWITCH PCB

FL 2 PCB

BALANCE PCB

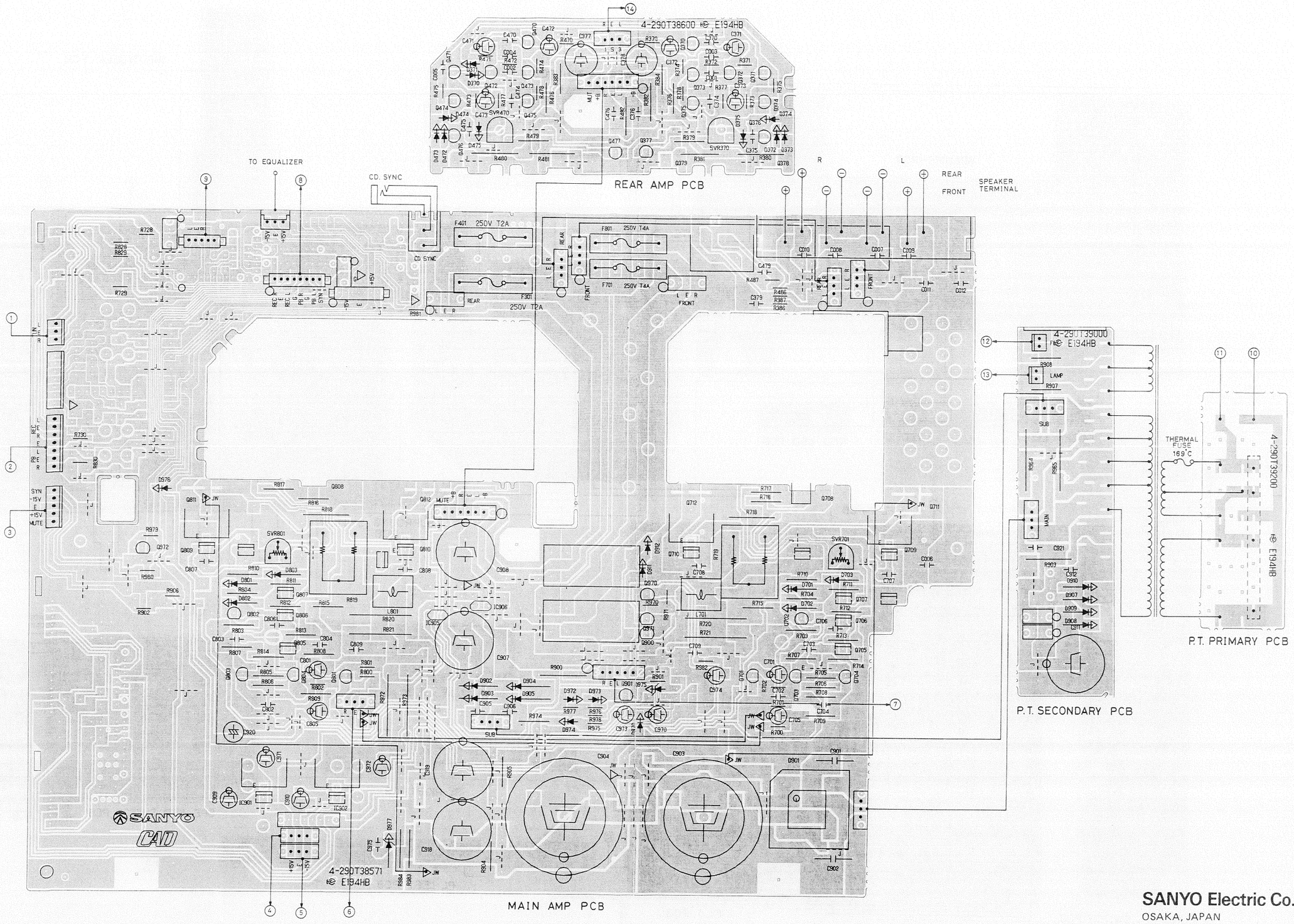
PL RIGHT PCB

PL LEFT PCB

SPEAKER SWITCH PCB

FUNCTION SWITCH PCB

FL 1 PCB



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